The Work Force of the Richelieu River Canals 1843-1950

P.-André Sévigny

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Abstract

The main purpose of a canal is to serve navigation, whether its users be military transport, cargo or passenger vessels, or merely pleasure craft. The historian almost invariably approaches the life story of a canal by tracing its structural development and, of course, its record of service throughout its existence.

But what of the people who, in good times and bad, were responsible for the efficient operation of the canal? What is known about the successive generations of men who, over the decades, devoted their energies to this task in various operational and administrative capacities? These are the questions that prompted a study of the Richelieu canals work force. The workmen who built the Chambly Canal and the Saint-Ours lock have been deliberately excluded from this study in order to focus attention upon the people who were directly or indirectly involved in the operation of these facilities. What were their actual duties? Their living and working conditions? How were they affected by the political, economic and administrative upheavals that marked the second half of the 19th century and the first half of the 20th?

Unpublished administrative documents and interviews with former employees of the Chambly Canal have provided answers to many of these long-standing questions.

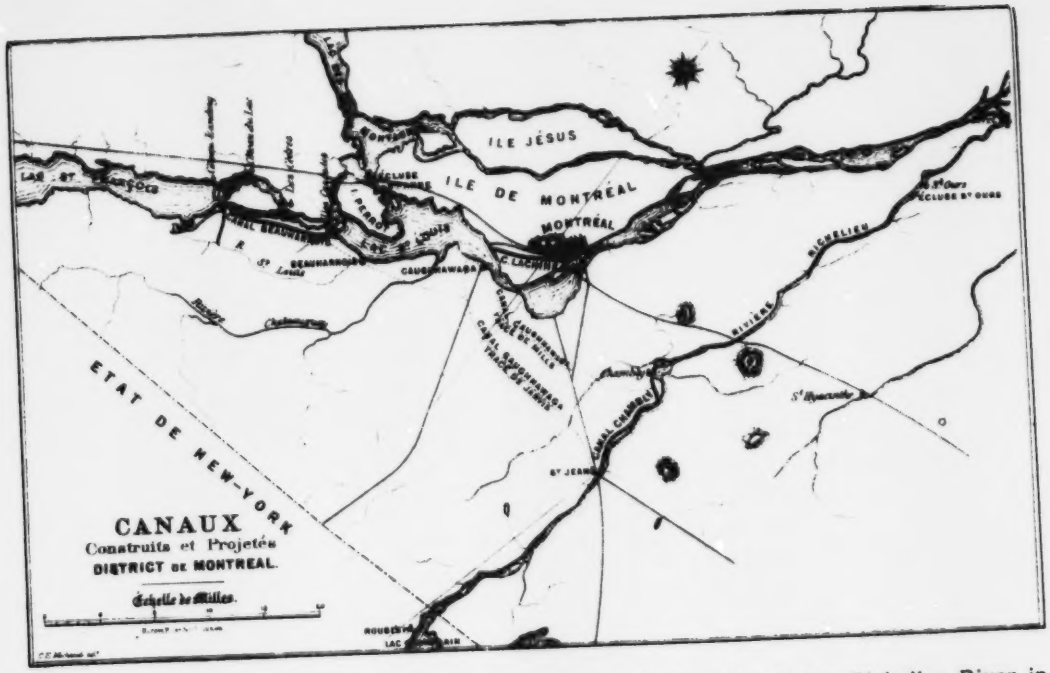
Submitted for publication 1980, by P.-André Sévigny, Historical Research Section, Quebec Regional Office, Parks Canada.

Preface

The study of the Richelieu canals work force is part of a research program which for several years has been examining the history of the canals. Sandra Gillis initiated the project in 1975 with a report on the structural history of the Chambly Canal locks. Three years later, in 1978, I completed a study of the commercial use of this canal from 1843 to 1960.

The research report now presented in a sense breaks new ground in that it not only deals with the broad area of social history, but for the first time includes the Saint-Ours lock with the Chambly Canal. In addition to providing a very useful basis for comparison, the structure long regarded as "the tenth lock in the Chambly Canal" is shown here to possess certain distinctive features that merit further specific research.

I received considerable assistance in my research on the work force of the Richelieu canals. Special mention should be made of the contributions made by present and former colleagues, in particular: Normand Lafrenière, historian of the Ottawa River canals, who had earlier undertaken a study of the social history of the Chambly Canal; Louise-Andrée Hardy, whose interviews with former Chambly Canal employees in 1975 were of invaluable assistance; and Marie-Claire Dufresne, who was unfailingly helpful in the role of research assistant.



1 The Quebec canal system in 1867. The map shows the location of the Richelieu River in relation to the St. Lawrence and Lake Champlain. It also indicates the location of the Richelieu canals. (Canada. Department of Public Works, *General Report of the Commissioner of Public Works, for the Year Ending 30th June, 1867* [Ottawa: Hunter, Rose & Co., 1868], Map 5.)

Introduction

Social history has for some time been gaining favour with the reading public and with researchers in Quebec and elsewhere in Canada. Largely as a result of the interplay of supply and demand, traditional history, with its focus upon title and rank, has gradually given way to reconstruction of the day-to-day lives of the unsung, ordinary people of bygone years.

The study conducted for over a year on the work force of the Richelieu canals was prompted, of course, by my own interest and that of the Parks Canada Historical Research Section in this type of history. Its first objective was to reconstruct the working and living conditions of the employees assigned to the daily operation of the Richelieu canals. First the various duties and responsibilities associated with the operation of the canals over the years were determined; then the status, working conditions, benefits and obligations of the workers were examined, with particular attention to the effects upon their lives of periods of economic crisis, war and political unrest.

The study included a further dimension in that it covered, in addition to the manual workers, the employees responsible for the local administration of the Richelieu canals, at Chambly, Saint-Jean and Saint-Ours, and for the regional and national management of these facilities. A knowledge of the organizational structure of the canals, the decision-making process and the various levels of responsibility was essential in order to produce an accurate portrait of the rank-and-file employees and their working conditions. The exercise also provided an opportunity to look at the situation of the local government officials and the office workers, whose interesting but little-known history offered a useful comparison with that of the manual workers.

However, research in the field of labour history calls for more than willingness; there must be access to reference material that will answer at least some of the researcher's questions. In addition to archival records, we were fortunate enough to find the administrative letterbooks relating to the Quebec canals. This collection, which covers the period 1852 to 1920, includes copies of all the letters written by the superintending engineer of the canals, whose office was in Montreal. The continuing series of questions and answers running through the letters tells a good deal about the living and working conditions of the canal employees during this period.

The discontinuance of this source in 1920 was compensated for at least in part by the more than a dozen interviews carried out in 1975 by a Parks Canada colleague with various elderly people who had been associated, directly or indirectly, with the administration or operation of the Chambly Canal. The reminiscences of these witnesses, many of which went back to the First World War, helped bring to life the daily activities along the canal between Chambly and Saint-Jean during this latter period of its existence.

The study has been divided into chronological rather than thematic segments. There are advantages and disadvantages to both methods, but it seemed that a study covering more than a century of history should avoid restatement and repetition as much as possible and adopt a generally evolutive approach to the subject. The following report comprises six chapters. Only the first departs from the chronological format; it outlines, by way of a necessary preamble, the historiography of labour, with particular reference to the strong points and the weaknesses of previous studies. More precisely, an attempt has been made to situate this study of rural and blue-collar officialdom within the historical literature dealing with workers in Quebec and elsewhere in Canada.

The actual chronological discussion of the subject begins with the second chapter. It covers only ten years, but these were characterized by inexperience and improvisation at all levels of the administration and operation of the canals. Chapter III describes the beginnings of a more organized administration that began to take shape between 1852 and 1867. The years from 1867 to 1896, described in Chapter IV, were marked by a redefinition of structures and labour standards and a proliferation of duties, and also by a long series of economic crises. The uncertainties of employment on the canals are the theme of a fifth chapter; from 1896 to 1920, political partisanship, the aftermath of the economic recession and World War I seriously unsettled the working environment on the canals and the Civil Service Commission endeavoured to restore some stability. A sixth and last chapter deals with the decline in commercial activity on the Richelieu and its effect on the workers; the years from 1920 to 1950, of course, brought the Great Depression and the Second World War, but in addition, the pernicious influence of political patronage continued to be felt from day to day.

Like other investigative ventures into new territory, this study is neither exhaustive nor final. The world of the rural civil servant between 1850 and 1950 has been, for all practical purposes, an unexplored area until now. In such circumstances, this contribution can be only a partial one. There may, nevertheless, be certain aspects of the subject in which a deeper penetration will enable us to achieve a greater insight. This unevenness of treatment is obviously a function of the reference material, but it does serve to identify possible areas for further research.

Chapter I
Historiography and the Search for a Context

One result of the current interdisciplinary approach to research is an increasing tendency to limit the historian's role to a search for documentation. Occasionally there will be a magnanimous request that he go so far as to "study" a particular document. This narrow and arbitrary definition is based upon a misconception of the historian's fundamental task and upon a deliberate (and self-serving) failure to distinguish the end from the means.

The written or otherwise recorded document is the instrument that enables the historian not merely to reconstruct the past accurately and objectively, but to gain an increasingly intimate understanding of particular events. The spatial dimension is a recognized and accepted condition in all disciplines, but only to the historian is time, to the extent that it applies, an essential condition to the understanding of his subject. It is impossible to assess or interpret a particular event in human history without reference to earlier, concurrent or subsequent happenings.

There are, of course, other disciplines – sociology and economics, for example – in which time is a necessary dimension; however, their concern is not to situate facts in their temporal context, but rather to develop models in which today's problems are set forth and resolved. In history, on the other hand, the dimensions of time and space are reconstituted in order to arrive at an understanding of events that occurred within them.

Placing a historical subject in its proper context can in itself entail an enormous amount of research, particularly if the time and space dimensions of the subject are broad and if little previous work has been done in the particular field. Such was the case with this study of the Richelieu canals work force. Not only did it cover more than a century, but it also dealt with a new and complex area: labour history.

In the absence of a definite context, therefore, the historiography had to provide an overview of the subject which would serve to some extent as a background to the study. It is an awkward expedient in several respects, as will be seen, and for this reason, in an attempt to compensate for its deficiences, comparative and contextual material has been used as much as possible.

General Historical Background

Although social history, particularly in the field of labour, has made tremendous strides in Canada, including Quebec, in recent years, it should be pointed out that this was a comparatively unexplored area of research some 15 or 20 years ago. Historians seemed especially disinclined to approach the subject. What was the reason?

2 The Chambly Canal in 1949, showing the location of the bridges and locks on the canal between Chambly and Saint-Jean.

> Conventional history, as envisaged by Charles Seignobos at the end of the last century, was based upon written documents, reflecting as a rule the interests of the privileged classes of society who had enough time, money and education to leave written records. Large numbers of the population, however, were preoccupied, not with writing, but with living, which, according to a popular 19th-century saying, meant not dying. Working people had other things to do than write their memoirs and collect papers! Confronted with this apparent lack of material, many historians turned to other sectors where written documentation was more plentiful. In Quebec and in the rest of Canada, as elsewhere, labour history has remained a poor relation in terms of historical research. [Translation.][1]

There are, of course, numerous and varied sources from which a workers' history can be compiled, but they must be sought out, often in out-of-the-way repositories.

The alleged paucity of documentary sources had a marked effect on the historiography of labour. Evidence of this can be seen, for example, in the bibliography compiled by André Leblanc and James Thwaites with respect to Quebec labour.[2] The titles listed in this book are grouped under chapter headings which in themselves reveal the extent to which the historiography relied upon the most accessible sources: the labour movement, unions and trades, labour conflict, the social environment, the labour press. A warning by historian Fernand Harvey indicates his awareness of this situation:

> Because of a strong tendency to confuse the working class and the labour movement, there is a risk that research may be misdirected and that many aspects of workers' lives which are outside the union movement may be overlooked. [Translation.][3]

It is true that from the end of the 19th century until the mid-1960s, labour historians concentrated almost exclusively on the labour movement and trade unionism, taking as their frame of reference in most instances the whole of Canada.[4] It was not until the 1960s that similar studies of labour in Quebec began to appear.[5]

At the same time, other historians were exploring the pathways of economic history. Their broad compendiums generally gave scant attention to the worker or his problems.[6] Fernand Ouellet himself observed, shortly after the publication of his ***Histoire économique et sociale du Québec, 1760-1850***, that whereas most research studies had until then focussed on the economic elite, the rural and working-class sectors merited similar attention.[7]

More recent compilations of Quebec socio-economic history reflect a marked change of attitude and an obvious effort to include the labour sector. Hamelin and Roby, in ***Histoire économique du Québec, 1851-1896***, while giving pride of place to the entrepreneurs and financiers of

the time, include some interesting sidelights on the lives of the colonists, the living conditions of the fishermen, urbanization and trade unions.[8] Closer to our own day, the recent *Histoire du Québec contemporain* by Linteau, Durocher and Robert reveals the concern in contemporary historiography with such basic themes as industry and the city, social structures (urban and rural), living conditions in urban and rural settings, the labour movement, the status of working women, rural co-operatives, and so forth.[9]

Economic histories, even though they may deal with labour movements, are an inadequate source from which to compile a history of the working class since the material they provide in this area is too general and superficial. Indeed, as historians Espesset, Hardy and Ruddell pointed out in 1972:

> Labour history should assert its independence in relation to the forces that have more or less stifled it; in response to economic histories that tend to ignore the existence of labour, it should depict all aspects of working life, and in response to specific histories of the union movement, it should endeavour to encompass all workers, unionized and non-unionized. It should go beyond strikes and produce a comprehensive overview of day-to-day activity. These remarks apply equally to the self-employed worker; it is time that a history was written of the humble, little-known people whose courage and perseverance helped build Quebec. [Translation.][10]

In response to the growing interest of this new generation of historians, many researchers have turned their attention in recent years to the daily lives of workers. In addition to theses produced by university students, there have been analytical and documentary research studies by various historians working individually and in teams.[11] Centres have even been set up for the study of labour history. This historiographic revival is so new, however, that it is as yet more a promise of things to come than a concrete reality. The history of labour is still far from complete.

Features of the Research

Research for this study of the Richelieu canals work force disclosed some particularly significant historiographical deficiences. Existing histories have dealt primarily with the industrial workers and thus with the urban milieu. This study has been situated in a different context.

Industry. Conventional histories have highlighted the labour movement, both in Quebec and elsewhere in Canada. The demands of workers, the formation of unions, the confrontations and strikes have almost always been viewed against the background of the factories and industries that employed the leather and textile workers, the miners, and others.

The new school of researchers are dedicated to going beyond trade unionism and making a thorough study of workers' living and working conditions. Until now, however, the focus has been on factories and industries in the private sector. The availability of material has been a factor, but there were other reasons, as Jacques Bernier explained:

> The growth of large industries, using mechanized production methods, changed the working conditions that had existed until that time and gave rise to a new class — the industrial workers. It was this category that we had in mind in our study of Quebec workers in the 19th century. Not because they were more numerous than the self-employed or the skilled workers, but precisely because they formed the nucleus of a new social class which would continue to increase in numbers, to grow stronger and to exert an ever more decisive influence. [Translation.][12]

The objectives may have been different, but the subject was the same. It has no relevance to the work force with which this study is concerned, which lived and worked according to the rules of its government employer.

Little research has been done on government corporations, particularly those existing in the 19th century. Their influence upon the living and working conditions of their employees has attracted still less attention. On the other hand, the major public works undertaken by the Canadian government, such as the railways and even the canals, have been a favourite subject with historians. Here again, however, they have confined themselves to the construction phases of the various projects, which were often highlighted by political scandals, financial imbroglios and labour confrontations.[13] It is not the purpose of this study to examine the work force that excavated and built the Richelieu canals, but rather to learn more about the employees that saw to their operations and daily maintenance for more than a century.

Town versus Country. The historiographical preoccupation with the industrial and manufacturing sector has inevitably accentuated its urban character. It is true that cities like Montreal and Quebec were ideal settings in which to observe the lifestyle and working conditions of the new social class that had emerged in the wake of the industrial revolution, the proletariat. However, there are workers outside the cities, and if Paris is not France, neither are Montreal and Quebec City the whole of Quebec.

A number of labour historians, while subscribing to this point of view in principle, display a surprising lack of discernment in their writings. Fernand Harvey, writing in 1972 under the title "Les travailleurs québécois au XIX^{e} siècle," announced early in the article that his subject was the urban Quebec worker in the 19th century.[14] Did this mean that to a historian, the worker was always a city dweller? Such a concept would at least explain why the history of the rural worker has yet to be written. One of the priorities of the new labour historians

is to demonstrate the originality of the Quebec experience in relation to Canada as a whole.[15] Another no less valid priority would be to show the distinctive character of rural workers as compared with their city cousins.

Be that as it may, a study of the Richelieu canals work force is ipso facto a study of the rural worker, as will be seen, for despite the presence of the city of Saint-Jean at the southern end of the system, the majority of the employees involved in the operation of the Chambly Canal and the Saint-Ours lock were country people. How did Canadian civil service historians view these workers who, though located outside the main centres, were nevertheless government employees.

The Government and its Employees

The Canadian civil service came into existence, legally speaking, in 1868 following Confederation; however, it was only with the passage of new legislation in 1918 that it acquired much of the structure it retains today. In 1929 Robert M. Dawson wrote the first history of the civil service of Canada, a work that, despite some criticism, is still authoritative.[16]

A number of historians, almost exclusively English-speaking, have since tackled the subject, generally in terms of the various legal stages through which the service has evolved and the rise of unionism within it. In addition to Dawson, these more recent writers include, in chronological order, W.L. Grant, W.R. Sharp, Taylor Cole and J.E. Hodgetts.[17]

The public service had received little attention from historians before Confederation. The best works on this period are still Dawson's "Canadian Civil Service before Confederation"[18] and Hodgett's *Pioneer Public Service: An Administrative History of the United Canadas, 1841-1867*.[19] Others have examined certain aspects of the service, such as its role during the two world wars[20] and the development of public service unions.[21]

In addition to merely following the lead of English-speaking researchers, dealing broadly with Canada as a whole and focussing more on the legal and structural evolution of the public service than on the working conditions and destinies of public servants, the historiography of the Canadian civil service reveals, in my view, a much more serious deficiency. Even before Confederation, government employees were divided into two groups, commonly referred to as the "Inside Service" and the "Outside Service." Taylor Cole indicates how the civil service act of 1868 affected the existing structure:

> This provided the beginnings of a crude classification system in the "inside service", consisting chiefly of the department staff employed in Ottawa, as distinguished from those in the "outside service", who were employed outside Ottawa. The Governor in Council remained in control of the outside service.[22]

For all practical purposes, therefore, civil servants working outside the federal capital were not governed by the legislation. Their exclusion was

perpetuated in the civil service acts of 1882 and 1908, which served almost entirely to consolidate the powers of the Civil Service Commission. It was only with the passage of the new act in 1918 that employees in the Outside Service were brought under the control of the commission in response to the employment problem created by the demobilization of large numbers of disabled servicemen.

Against this background, it is hardly surprising that historical analyses of the development of the public service tended to be restricted to the Inside Service of departments in Ottawa. Whether the issue was political patronage, admission examinations, classification, salaries or working conditions, the frame of reference was inevitably the central bureaucracy. For this reason, the historical record has been of little assistance, obliging the breaking of new ground.

While the field of labour is not, in itself, a new area of research, it has suffered the rather common fate of an overly narrow approach. This is partly attributable to the availability of source material and to the fact that very few researchers have attempted to find unpublished documentation. However, there is another factor. Historians, like other observers, are susceptible to the lure of headline events and are consequently inclined to devote more attention to the dramatic aspects of particular phenomena than to what may lie beneath the surface. This tendency has resulted in the past in a historical record oriented much more toward unions, strikes and labour legislation than toward the living and working conditions of the workers. Fortunately, these attitudes have changed considerably in the past several years. It is hoped that this study of the Richelieu canals work force will bear witness to this change.

Chapter II
Trial and Error: 1843-1852

Organizational Structure of the Canadian Government

While the focus of this study was essentially the operational staff of the Richelieu canals, research necessarily led to an examination of the formation and development of the administrative structure of the Canadian government.

The workers constituted, in fact, the base of an organizational pyramid within the government administation. A knowledge of this structure is essential to an understanding of the employees' status and their roles. How were decision-making powers allocated within this framework, particularly with respect to the hiring and terms of employment of workers? Specifically, how was the management of a canal and its staff exercised? What changes took place in administrative structures and standards, and how did these changes affect the lives and working conditions of the men attached to the various canals? These were some of the questions for which answers were sought in undertaking a study of the canal workers in their particular administrative context.

When the Chambly Canal and the Saint-Ours lock were opened in 1843 and 1849 respectively, they fell under the administrative jurisdiction of the Board of Works. This body had been set up in Lower Canada in 1839; it had five members and was responsible for supervising the execution of projects and making recommendations with regard to public works.

Before the board was established, responsibility for the implementation of public works projects such as roads, bridges, canals, harbours and the like was assigned by the governments of Upper and Lower Canada to ad hoc commissioners. These commissioners were often asked by the government to remain on when the facilities were completed to see to their administration and operation. This was a particularly common practice with respect to roads and canals.[1]

In 1840 the Board of Works became a permanent agency in Lower Canada, and after the union in 1841 its jurisdiction was extended to United Canada. An extensive reorganization in 1846 resulted in the establishment of the positions of chief commissioner and assistant commissioner.

> The Commissioners were given the power to enter into contracts on behalf of the province, but could not spend funds on any work which had not been previously sanctioned by the Legislature. They were also given control over the construction and maintenance of all canals, roads, bridges, timber slides, public works, and buildings.[2]

At the time of the opening of the Chambly Canal in 1843, there was practically no governmental administrative structure. The civil

service as we know it goes back only to 1847, as R.M. Dawson points out: "the formative period of the civil service was broadly coincident with the winning of responsible government: it was one phase of the confused struggle which culminated in colonial home rule."[3]

The Board of Works was thus under the management of the commissioners, who, until 1847, were appointed by the governor of Canada. With the advent of responsible government in that year, the governor relinquished his prerogatives in the way of patronage, or appointments, to the elected representatives. Thereafter the commissioners were chosen by the prime minister.

The position of commissioner in those days was not a particularly safe berth. During the regime of the governors, "the general rule was that appointments lasted for life, as removal appeared to reflect on the character and integrity of the incumbent." However, after 1847 a commissioner's tenure was for all practical purposes a matter for decision by the cabinet. Since "the Cabinet made all appointments to the service from its own political supporters,"[4] it was not unusual to see a purge of senior civil servants when the government changed. The commissioner positions soon came to be recognized as political appointments, thus eliminating any hope of an incumbent's survival when a new group came to power. This system of political patronage was deeply entrenched among our neighbours to the south, and our parliamentarians were quick to follow suit, much to the dismay of the Colonial Office in London.[5]

The years following the establishment of responsible government were marked by considerable instability. "Alliances were fragile and party discipline was as yet unknown. From 1854 to 1864, a dozen departments came and went in the wake of shifting electoral alignments and issues." [Translation.][6] It was not surprising, therefore, that the succession of commissioners appointed to the department showed little talent or taste for organizational planning during their brief tenure and preferred to devote their energies to more immediate problems.

Apart from patronage, the location of the capital (and thus the seat of government) was a drawback to a commissioner's career. In 1841, following the union, the seat of government had been established at Kingston. In November 1843 it was moved to Montreal, where it remained until April 1849. On the 25th of that month, demonstrators set fire to the parliament buildings. After this tragic occurrence, elected representatives and government officials met alternately in Toronto and in Quebec City until the government buildings were opened in Ottawa, the new capital, in 1865.

Correspondence emanating from the canal office in Montreal testifies to these peregrinations. It also indicates that the commission (or at least the chief commissioner) appointed in Montreal or Quebec City was French-speaking, while a parliament sitting in Toronto or Kingston assigned the post to an Anglophone. In principle, this alternating arrangement was eminently fair; however, in practice, and quite apart from the change of language, it downgraded the position of Public Works commissioner since it left the incumbent only time to deal with current business; any major change in the administration of the board was out of the question.

In an atmosphere of such uncertainty and instability, no organization, either private or public, could survive or function without some sort of ongoing and effective support. At the beginning of the 1840s the backbone of the Board of Works was its secretary, Thomas A. Begley.

From 1843 to 1858, when he left the board, Begley directed the country's public works, from planning to operation, out of Montreal, Quebec City and Toronto. Except for certain political and financial decisions affecting the administration of the board, it appears that the secretary enjoyed a free hand in managing his domain.

While, unfortunately, the organization chart of the pre-Confederation Board of Works was not located, documents from the period indicate that the staff was not large. Stationed in the capital with Begley was the board's chief engineer. With the assistance of local superintendents, with whom he maintained close contact, the secretary oversaw the administration and operation of public works, including the canals. The chief engineer's role was to provide technical expertise for the construction and repair of these facilities. Reporting to him was a team of engineers that supervised the technical work involved. It is interesting to note that the Public Works engineers, particularly in the 19th century, enjoyed enviable reputations, extending in some instances beyond the country's borders. The names of Samuel Keefer, George Keefer, H.H. Killaly, John Page, G.F. Baillargé, Ernest Marceau and others come to mind in this regard.

Engineers were, in fact, the representatives of the Board of Works at the regional level, at least until 1851, when the position of superintending engineer for the canals was established. In western Quebec, they occupied an office "near the lower terminus of the [Lachine] canal";[7] documents from the period describe their premises variously as "Engineer's Office, Montreal," and "Lachine Canal Office, Montreal."

A number of officials were housed in this office, including the superintendent of the Lachine Canal and his toll collector, the Public Works paymaster, the engineers assigned to the Quebec canals (Richelieu, Lachine, St. Lawrence, Ottawa River), and others attached to various regional facilities. All these officials acted, to some extent, as intermediaries between the secretary of the board and the chief engineer on one hand, and the superintendents or local officers on the other.

Local Administrative Expedients and Operational Deficiencies

At the local level, who was responsible for the administration and operation of the Richelieu canals during their first years in service? The letterbooks from the engineer's office in Montreal go back only as far as 1852. Fortunately, other records provide the information necessary for some understanding of the early operation of the canals.

The original organization chart of the Chambly Canal is difficult to reconstruct. On 14 August 1843, a few months before the opening of the canal, the Board of Works announced the following appointments. Michel Borne was named toll collector at Chambly at a salary of £120 a year; for an additional £80, he was to carry out the duties of harbour master and lockmaster for the three combined locks.

At Saint-Jean, Daniel Phelan had similar duties to Borne's, but his annual salary as harbour master and lockmaster was only £60, there being only one lock at Saint-Jean, as opposed to the three combined locks for which Borne was responsible at Chambly. The notices of these appointments stipulated, moreover, that "each man is to employ, from their salary, a labourer to assist in the operation of the lock"; it was also understood that "the Chambly office will receive an assistant during the navigation season, to be paid from the receipts from tolls."[8]

Did this mean that there were no plans to appoint a superintendent to be responsible for the management of the canal? The situation with regard to a superintendent at Chambly during this period is unclear. Between 1848 and 1850, Michel Borne signed his correspondence as "Collector and Superintendent, Chambly Canal." In 1852 he signed himself simply "Superintendent, Chambly Canal." However, his appointment in 1843 was as collector, harbour master and lockmaster for the northern section of the canal.

During the years from 1848 to 1852, Michel Borne had a good deal to say about the chaotic administration of the Chambly Canal from the time it opened. Feeling aggrieved by some of his superiors' decisions, he brought his complaints and demands for redress in turn to the attention of the commissioners of the Board of Works (1848); Lord Elgin, the governor general (1850); and the secretary of the Board of Works (1852). Borne's various memorandums throw considerable light on the administration of the canal in those early years; in order to convey their rather complex content and meaning, they are quoted at some length.

On 11 October 1848 Borne laid his case before the commissioners:

> The letter from the Secretary of the Board of Works, dated 30 May 1843, indicates that I was appointed Collector, Master of the Harbour "and of the three combined Locks at Chambly." Since assuming my duties, I have taken care not only of the aforementioned Locks, but also of five others, located a mile and a half from my Office, in addition to eight "Swing Bridges" six miles from my office and twelve bridges on Ile Ste Thérèse, twelve miles away.
>
> As can be seen from the letter dated 31 May 1843 from C. Dunkens, then Secretary to His Excellency, he was pleased to appoint me Collector, Harbour Master and Lockmaster at a salary of £200 on condition that I employ a Lockman at my own expense during the year, or rather during the season.... The letter makes no mention of a Canal Superintendent for the obvious reason that one had already been appointed by the name of P. Redpath at a salary of 10s. a day.... This Superintendent was dismissed on 2 August 1843 by the Honourable Mr. Killaly, who was in Chambly at the time, and [Mr. Killaly] named me to replace Redpath, promising me a certain Salary, which I have yet to receive.

> On 8 January 1844, I received a letter from the Board of Public Works ... informing me that a request had been submitted to His Excellency to have my permanent salary as Collector, Harbour Master and Lockman fixed at £200 a year.... On the 17th of the same month, I received a further letter dated the 16th, telling me that His Excellency had approved the Board's request; this letter confirmed the one of 31 May 1843, but still made no reference to a Superintendent, an appointment that is absolutely essential. It is even more necessary here than on the other Canals, since the Embankment, being entirely of clay, is more fragile than any of the others and requires more supervision. In fairness, therefore, I feel that I should be paid for this item from 2 August 1843 to date. [Translation.][9]

Borne's recital continues with a reference to a letter he had received from J.W. Dunscomb dated 13 April 1846, which informed him of the decision of the governor-in-council to appoint only one collector, in order to limit expenses; this appointee was also to act as superintendent at a salary of £120. At Saint-Jean, the duties of collector were carried out by a lockman who was paid £50 a year and who, in Michel Borne's words, "is responsible to me and whose books I have to inspect" [translation].[10]

As Borne saw it, the secretary of the board, Begley, had managed to have the positions of harbour master and lockmaster abolished in order to reduce Borne's salary to £120 "in the hope that I would give up my position and he could replace me with one of his friends" [translation].[11]

Having obviously failed to win his point, Borne took the matter up again in March 1850, addressing his complaint this time to the chairman of the board. He pointed out that as collector, he was receiving an annual salary of only £50, while his opposite number on the Lachine Canal was getting £300 and the latter's assistant, £100. He admitted that the Lachine Canal generated much more revenue than Chambly, but he was at pains to add that the duties were the same and, in particular, that "by order of the Department of the Board of Public Works dated June 20 last, I have been directed to allow any ships that so request to pass through at night, which means that I have to be up for part of the night, whereas until now, vessels were only allowed through during the day" [translation].[12]

Borne also asked to be reinstated in his former position as harbour master and lockmaster. His reasons for this request are worth quoting.

> A Harbour Master is indispensable and although no Salary has been paid to me for this work since 1846, I have nevertheless carried out the duties until now; they consist of lining up the Vessels in the Harbour in the order of their arrival and passing them through the Lock in that order. Arguments often break out among the Pilots,

> some claiming right of passage on grounds that they are stronger than the others, and I am called in in my capacity as Harbour Master to settle the matter, since they all recognize my authority and my decision is final.
>
> As Lock Master, I have to visit the Lockmen during the day and at night, to make sure that they are sober and at their posts, because they are often exposed to temptation from the ships' Masters, who are not all Temperance men.... There are eight Locks at Chambly and six Lockmen spaced over a mile and a half under my supervision. [Translation.][13]

By February 1852 the question was still unresolved; Borne informed the secretary, Begley, of his dissatisfaction, pointing out that he was continuing to perform the duties of harbour master and lockmaster, in addition to those of wharfinger, without remuneration.[14] (This new function will be discussed below.) The important aspect of this dispute is that a superintendent had been appointed to the Chambly Canal in the spring of 1843 and that Borne officially took over the post on 13 April 1846. What precisely were the duties of the position at that time? The documents do not spell them out, but it is clear from Borne's complaints that a superintendent was expected to manage and at the same time supervise the employees, structures and services encompassed by the canal. The positions of harbour master, lockmaster and wharfinger were no longer clearly defined, since all these functions and others as well were the responsibility of the superintendent.

This arrangement obviously resulted in substantial savings. Why, then, were the title and salary of collector retained? Could the superintendent not have been required to take on this responsibility as well, at the same salary? The fact was that the position of toll collector was not under Public Works jurisdiction, but under that of the office of the inspector general, later the minister of Revenue.[15] That office established the terms of employment and paid the employee. In those early days on both the Richelieu and Ottawa River canals, the office of the inspector often preferred to have the duties of collector performed by the superintendent or the officer responsible for the canal, with, of course, the concurrence of Public Works. The superintendent saw no objection to the arrangement, which meant additional salary and little extra work, at least at the beginning.

There was a second collector at Saint-Jean; Daniel Phelan occupied this position from August 1843 on. He was also harbour master at Saint-Jean and lockman at that location. By 1846, no doubt for reasons of economy, there was no longer a collector at that end of the Chambly Canal; the lockmaster on duty maintained the toll registers unofficially, and the books were checked and approved by the superintendent-collector. This expedient, however, did not last; a list of canal employees drawn up early in 1852 shows that John Brennan occupied the position of assistant collector at Saint-Jean and that he had no other duties.[16]

Lockmasters and Bridge Keepers: Redressing the Balance

The hiring policy at the Chambly Canal during this period was astonishingly haphazard and unrealistic. This may, of course, have been due to budgetary constraints or possibly to the unexpected and unforeseeable use made of the canal. The day of the pre-construction cost-benefit study and market analysis had not yet arrived; however, Canada was not without experience in building canal systems, and the managers could not have been unaware of minimum operating standards, particularly with regard to manual operations.

In 1843, shortly after the system was opened, there were only four lockmasters to operate the nine locks of the canal. At Saint-Jean, the collector, Daniel Phelan, assigned lock No. 1 to his son Patrick, paying him from his own pocket. Borne did the same at Chambly with respect to the combined locks 7, 8 and 9, for which he was responsible. Two other lockmasters operated the remaining five locks, numbered 2 to 6.[17] What were the working conditions of these men?

Their wages in 1843 were two shillings and sixpence. From 1 May to 1 September they were on duty from 4:00 a.m. to 8:00 p.m.; before and after this period, their hours were from daybreak to nightfall. At that early stage, Borne had already introduced a practice that was to become standard in the next period and prove very efficient: the use of his men, even outside the navigation season, to make repairs to the canal. They worked then from 6:00 a.m. to 6:00 p.m., with Borne acting as foreman. As a justification for this initiative, Borne took pleasure in pointing out that "since the 2nd August no expense whatever has been incurred for labourers in repairing the Canal, nor for Sundry other works. I have had all necessary repairs and all work done by the Lock tenders and I flatter myself that the whole is in the best order."[18]

Except for the lockmaster at Saint-Jean, none of these employees was assigned to a particular lock. This was soon to become the rule, but in 1843 Borne had no other choice. With three men to operate eight locks, there could be no staying in one place; mobility was essential. "They were stationed indiscriminately at either of the eight locks, as occasion required."[19]

The four lockmasters on the Chambly Canal lived in houses beside the canal so as to be available at all times. These houses were provided by the government expressly for their use at locks 1 (Saint-Jean), 2, 6 and 8; they had been built by the engineer George Keefer in the fall of 1842. A brief description dating from that time refers to "Cedar posts and 3 inch plank, with small brick chimney, stove pipe and a small privy behind each."[20] They were still in service in 1867: "There are three single-storey lockmasters' houses, built of wood, 24 feet x 16 feet, located at locks 2, 6 and 8; there is a fourth at lock No. 1, measuring 24 x 12, also with one storey" [translation].[21]

In the spring of 1847, at the request of the users of the canal, the government considered the feasibility of opening the locks on a 24-hour basis every day except Sunday. When asked his views on this proposal, Borne agreed and indicated that unless there was a large and unexpected increase in traffic, no additional lockmasters need be hired. However, the lockmasters already employed would only agree to take on the extra

work on condition that they were paid three shillings and sixpence a day, a shilling more than their existing wage.[22]

In June the lockmasters revised their stipulation and demanded four shillings a day to work round the clock, "this on the ground that bread and meat is so very dear that they cannot afford to support themselves and family with so small wages."[23] They threatened a work stoppage if their demand was not met. The matter apparently rested there since it was only in June 1849, two years later, that the canal was opened to day and night traffic. To avert the threat of a strike, the Board of Works agreed to a compromise, increasing the number of lockmasters and fixing their salary at three shillings for a 24-hour day.[24] As a result of this decision, the number of lockmasters had risen to seven by March 1850.[25]

By 1852 there was a lockmaster at each of the canal locks. These nine men were employed daily except Sunday throughout the navigation season at a salary of three shillings a day. Management also agreed to hire lock labourers during certain periods: "Labourers are allowed in the Summer Season for a certain time when the Square Timber passes, for no man could stand day and night without resting."[26] The five new lockmasters were not provided with houses, as had been the case with the original four. New lockmasters' houses were not built until the 1870s, which gave rise to numerous protests.

It had thus taken ten years to establish the need to station a man at each lock. It took as long to discover that the numerous bridges spanning the 12-mile length of the canal constituted serious obstacles to navigation on the waterway, particularly when no one was specifically responsible for operating them. It was only in 1852 that employees were assigned to operate and maintain the bridges. Borne recounted that during the years from 1843 to 1852, the bridges

> have been opened by the drivers of the tow path cattle, which is sufficient for row boats or sail boats; but in the case of steamboats, this cannot be done; their speed is too great to admit of the lock keepers preceding them to open the bridges, and besides, the distance between the first and the last of them is five miles.
>
> Mess[rs] Andrews' steamboat is the only one that has hitherto used the canal. Their practice is to engage a man for 2/6 to precede their boat on horseback to open the bridges for themselves, and this ought for the present to be continued.[27]

Using the drivers of tow horses, or a hired man on horseback, to open and close the canal bridges was equivalent, for all practical purposes, to instituting self-service. It was not in itself a bad method, and was even an economical one in terms of manpower; however, apart from slowing navigation on the canal, it resulted in continuing damage to the bridges. By the beginning of 1852 the situation had become intolerable and every effort was being made to find a solution.

> As there are no bridge tenders, the boatmen are required to send one of their men forward to open the bridges and close them after the boat has

> passed; this duty is generally attended to during the day time, and when it is likely that a [_____] could be proved against them, but wholely disregarded in every other instance, the consequence is that the bridges are constantly in want of repairs and there appears to be no remedy for this except to appoint bridge tenders who will be responsible for any injury which the bridges or their abutments may receive, unless such injury and the name of the vessel causing the injury be reported to the superintendent in time to detain the boat till payment be made ... for the cost of the repairs.[28]

At that time, excluding the Jones bridge linking Saint-Jean and Iberville, there were eight bridges on the Chambly Canal. As seven of these were at some distance from the locks, it was essential that they be manned by an operator-supervisor at all times. It was suggested that the numerous farm bridges crossing the canal be kept open when not in use.[29]

The Board of Works authorized the hiring of seven bridge keepers and the construction of an equivalent number of watch houses to provide shelter for them. By August 1852, construction of these little houses was almost completed and preparations were under way to hire the bridge keepers, at a salary of three shillings a day.[30] The watch houses were frame structures, 12 feet square and 8 feet high, each containing a wooden bunk and a stove.[31] Public Works, in fact, built ten of these small shelters, the three others being assigned to the lockmen at locks 3, 4 and 5, who were not provided with lockmasters' houses.

In addition to these employees at the Chambly Canal during this period, there was also the winter maintenance man. Borne had requested that a man be hired for this purpose in December 1846:

> One man should be kept on pay during the winter months, until the next opening of the navigation, whose duty would be to perform such labour about the bridges and roads dependent on the canal as the law requires; and to attend to the still more important duty of preserving the locks, their gates, the sluice, waste weirs, etc. from such damage as might occasionally occur from ice, thaws, falls of snow.

Borne pointed out that it had previously been the practice to assign this work to the four lockmasters, but that one workman could handle it adequately, under his supervision, for a salary of nine dollars a month.[32] He renewed his request the following year and this time it was granted.[33]

It was during these years that the canal workshop and storage depot was built at Chambly. As early as 1844 the superintendent had proposed the construction of a one-storey frame building, on a stone foundation, 50 feet by 30, divided into two sections, one to house the storage depot and the other the repair shop.[34] Work did not begin on the structure until the end of 1847; Borne was impatient to have it

completed so that the carpenters could use the workshop to repair the lock gates.[35] This was no doubt the building described in the annual report of the commissioner of Public Works in 1867 as an old wooden building measuring 53 feet by 25, serving as an equipment shed and workshop, in good condition.[36]

The Saint-Ours Lock: A False Start

Thirty-two miles downstream from Chambly and 14 miles from the mouth of the Richelieu, construction was proceeding during this period on the Saint-Ours dam and lock. This five-foot rise was an essential complement to the Chambly Canal on the Richelieu waterway. Despite its importance to the canal system, there was only one lock at Saint-Ours, and in terms of manpower in particular, it was very different from a canal like Chambly. However, the existence on the Richelieu of two such differing facilities enhances the interest of a study of their work forces, since it allows a comparison of the particular features of each.

Although the Saint-Ours lock was opened to navigation late in 1849, it only began normal operation in 1852. Severe spring floods in 1850 submerged the lock, and a project to raise the walls of the canal by five feet lasted through most of 1851.[37] This construction activity may account for the almost complete absence of records of the day-to-day administration of the lock and its personnel, at least prior to 1852-53.

In September 1852, for example, the superintending engineer of the canals in his annual report to the secretary of Public Works referred only to the Lachine, Beauharnois and Chambly canals. No mention was made of Saint-Ours.[38] It is likely that the lock, although operational, was considered to be an unfinished site. Moreover, in the fall of 1852, navigation at Saint-Ours, while not interrupted, was seriously hampered by a lack of depth in the approach channels on both sides of the lock. Dredging became necessary, and boats passing through the lock in either direction had to be piloted and guided by the site superintendent. Deepening of the channel was still going on in the spring of 1853.[39]

There was a superintendent in place at Saint-Ours as soon as the lock was opened in the fall of 1849. His name was R.N. Harrison, but nothing is known of his background. Shortly after his death in 1853 the engineering office in Montreal spoke of him as an "old and faithful servant,"[40] which suggests that he was himself an engineer, as might well have been the case in light of the work in progress at Saint-Ours between 1849 and 1852. Moreover, he wrote personally to Samuel Keefer, the chief engineer at Public Works, which an ordinary superintendent would not have done.[41]

At this time Jules Leboeuf was filling the positions of both lockmaster and toll collector,[42] but had hired a clerk at his own expense to carry out the collecting duties.[43] Before 1853 Leboeuf had the assistance of at least one lock labourer; this man's salary was increased in that year to three shillings and sixpence a day.[44]

There were few buildings at the lock site between 1849 and 1852. Their arrangement is clearly shown on a site plan drawn in 1853.[45] The superintendent's residence, located on Ile d'Avard, was a frame house, 36

feet long and 22 feet wide. It was, in fact, a little more than a shack: "it appears the house, when built, was only intended as a temporary building, built by the contractors for their own accommodation during the construction of the lock and consequently built in the cheapest manner."[46]

The lockmaster-collector occupied a watch house 12 feet square, modelled no doubt on the ones built at the same time along the Chambly Canal. This small wooden building served as lockmaster's house and tollhouse and was also located on Ile d'Avard, beside the lock.[47]

Attached to the superintendent's house was a series of connecting wooden buildings, comprising a small structure 10 feet by 10, used by the superintendent as a summer kitchen, an equipment storage shed 23 feet by 15, and a stable 10 feet by 12.[48]

The ten years just covered constitute a brief but clearly defined period which has been discussed as a separate topic so it can be properly understood. In any human undertaking, experience is only acquired through trial and error over a span of years. These learning periods are almost invariably marked by improvisation, a lack of planning, an absence of functional and practical structures, considerable individual initiative and limited efficiency.

The Richelieu canals, like others constructed at the time, had to suffer not only their own growing pains, but perhaps to a greater extent, those of the higher civil service. While the next few years may in some respects be regarded as a period of continuing preparation or exploration, particularly since it preceded Confederation, there can be seen in it a clearly defined trend toward standardization, organization and efficiency. Social history shows that such periods are of crucial importance to workers.

Chapter III
Organization and Uncertainty: 1852-1867

The period from 1852 to 1867 was far from uneventful. Unsettling and paradoxical to be sure, but at the same time, critical and decisive. Indeed, depending on the perspective, the impressions left by these years may vary quite widely. An analyst looking at the economic situation, commercial activity and even the structure of the Chambly Canal would probably describe this stage of its existence as transitional, uncertain and confused, not to say stagnant. A technocrat, on the other hand, might be more impressed by the organization of the Richelieu canals, the marked improvement in administrative structures and the specialization of occupations. The history of the canals from 1852 to 1867 reflected in fact that of the country as a whole, preoccupied as it was with considerations of form while its very substance was in question.

Canals without a Future?

In an earlier study dealing with the commercial history of the Chambly Canal, I have shown that the Richelieu canal system at the beginning of the 1850s faced a dark future.[1] It may be useful to review these observations briefly here in order to place the history of the work force more clearly in context.

In contrast with the high level of activity on the Chambly Canal during the 1840s, the period of 1850 to 1855 saw a substantial decline in shipping on the Richelieu.

> While the volume of goods carried on the canal rose from 18 835 tons in 1848 to 77 216 tons in 1849 and the number of vessels increased by almost 600 per cent, the year 1850 brought a decline under both headings which grew more marked over the ensuing four years. In 1852 the volume of goods carried was 20 per cent below that of the previous year; at the same time, total tonnage amounted to only 82 618, compared with 143 194 tons in 1850. Activity declined still further from 1853 to 1854: goods carried fell by 27.6 per cent and tonnage by 34.6 per cent. [Translation.][2]

Faced with diminishing revenues, several shipping companies withdrew their steamships from the Richelieu. The downturn was particularly surprising in light of the slow but steady commercial growth that other waterways were experiencing.

There were a number of possible reasons for the fate that overtook the Richelieu, one of the main ones being undoubtedly the Chambly Canal itself. Over-utilized since its opening and, in particular, poorly

supervised, by 1848 it was in sorry condition. Major repairs were needed, especially to the locks where the walls had been literally torn away and demolished by the passage of ships that were too large. The locks were, in fact, obsolete. Designed in 1820 with average lengths and widths of 120 feet by 24 and depths of scarcely more than 6 feet 6 inches, they were adequate for the navigation of that time but incapable of meeting commercial requirements of the mid-1800s which included, in particular, accommodating a proliferation of increasingly large steamships.

A virtually inoperative canal system coupled with a sharp downturn in commercial activity brought a vigorous reaction from Canadian businessmen, especially those in Montreal, who had never appreciated the Sorel detour necessitated by the Richelieu route. Under pressure from these influential merchants, the Canadian government began seriously to consider linking Montreal and Saint-Jean by a direct inland canal. The Caughnawaga canal project, as it was known, derived its name from one of the three localities proposed as its northern terminal, the other two being Longueuil and Beauharnois.

During the 1850s and 1860s this project engaged everyone's attention and monopolized all available expertise.[3] And while studies and consultations involving such prominent engineers as J.B. Jarvis and E.H. Tracey proliferated, the Chambly Canal stagnated: "only minimal maintenance was carried out to avoid total collapse; by the mid-1850s action could be postponed no longer."[4] Repairs were made to many of the locks in 1855, but there was no question of enlarging them. The Caughnawaga canal project never materialized, but it was under consideration for so long that it ruined for all practical purposes the future of the Chambly Canal and of commercial navigation on the Richelieu.

Decentralization and Regional Initiatives: The Superintending Engineer of the Canals

These dark years, however, were a time of administrative reform. What was the reason for this surge of vitality during a period so lacking in promise? The administrative changes were introduced to improve control on all the canals and thus applied to those on the Richelieu, despite their particular situation. The Richelieu canals of themselves would not have warranted such action.

The administrative changes had little significance at the national level. In 1859, under a new act of Parliament, the Board of Works became a department. This act, essentially a codification of existing legislation, provided that the department would be under the direction of a commissioner and a deputy commissioner, but otherwise did little to change the existing structures at that level. It did not alter the role or functions of the agency, which retained as its principal responsibility the construction and maintenance of the vast system of canals from Montreal to Lake Erie.[5]

Once again the Public Works commissioners left the day-to-day administration to the secretary. Although confined to the capital, the latter was responsible during the preceding period for the efficient

operation of all the sites under his authority and he carried out his mandate by issuing instructions directly to the engineer stationed temporarily at a particular canal or to the canal superintendent. Communication under this system of remote control was difficult and was usually limited to dealing with administrative emergencies. The on-site officials, most of whom had no experience, were only capable of handling routine matters, and their administration was consequently haphazard and disorganized.

The obvious solution to the communication problem was to reduce the distance by means of an intermediary. An appointee competent in the management of material and human resources as well as engineering, strategically located near a group of sites of which he would be in charge, would be in a position to get the senior civil servants and the local officials on the same wave length. The incumbent of this new position would have to be trustworthy, reliable and efficient, capable of assuming considerable responsibility and of exercising initiative in a variety of ways. This master organizer was to be the superintending engineer of the canals.

It is not known whose idea it was to create this position, but it is reasonable to assume that as the person responsible for the administration and operation of Public Works, it would be in the secretary's interest to see a rapid improvement in the organization of the board. The appointment of such a regional supervisor would relieve him of a host of local administrative headaches which were, after all, not his responsibility. It would allow him to devote his time to his supervisory role at the national level.

The first superintending engineer, in fact, assumed the position as a sort of interim measure in November 1851, toward the end of our preceding period.[6] There was a superintending engineer in office when the duties of lockmaster and bridge keeper were redefined in 1852, and it is safe to assume that he was the initiator of the changes.

Between November 1851 and September 1852 the position of superintending engineer was held by three engineers in succession: J.F. McDonald, Charles Legge and John Page. It was evidently not their intention to take on this responsibility permanently; the secretary, Begley, had probably asked them to carry out the duties on a temporary basis while he continued his search for the ideal candidate. It may be said, therefore, that the first permanent superintending engineer of the canals was John G. Sippell, a professional engineer. Appointed in July 1853, he occupied the position continuously until his death on 26 September 1879; it was a quarter century that was to leave its mark on all aspects of the Eastern canal systems.

One fact is particularly indicative of the administrative deficiencies of the Board of Works and of the novelty of the position of superintending engineer. On 15 August 1853 John G. Sippell arrived at the canal office in Montreal to take up his new position and introduced himself to engineer John Page. Page, who had just learned of the appointment, was unable to tell the new superintending engineer the extent of his territory. Did it include, for example, the Ottawa River canals? What about the St. Lawrence canals above Beauharnois?[7] This is clear proof that Sippell was the first to assume the position of

superintending engineer of the Quebec canals or, in other words, of the Montreal district.

Begley hastened to provide Page with the terms of reference of the position and a list of instructions for Sippell. These directions are interesting for two reasons. They set forth in detail most of the duties and responsibilities that would devolve upon the new superintending engineer, and they constitute a unique example of such instructions for they do not appear again in the documentation. They therefore merit examination.

> By instruction from the Commissioners of Public Works, I am directed to place under your immediate superintendence the following mentioned works, as also to give you some idea of the duties which you will be expected to perform:

- most important duty: to ensure that navigation in the canals proceeds normally and that all regulations are observed;
- to see that all superintendents and other employees carry out their respective duties;
- to report to the secretary any infraction or negligence on the part of an employee;
- in order to minimize unnecessary expense, to provide estimates and reports describing the nature of any work required and, after authorization, to award contracts;
- in case of accident or damage, to inform the board and have the necessary repairs made as quickly as possible so as to reduce any interruption of navigation;
- to see that such repairs are effected by the local superintendents as efficiently and economically as possible and at the most appropriate time;
- to obtain prior authorization for any improvements;
- to report regularly (at least once or twice a month) on all sites under his authority;
- to investigate and report on any matter referred to him by the secretary of Public Works or other senior officers;
- to address all communications to the secretary of Public Works;
- to retain in his office copies of all correspondence, contracts and agreements and file them systematically and efficiently;
- to install his office in the building near the lower end of the Lachine Canal; to reside preferably in Montreal even though his duties will require him to make regular visits to the Beauharnois and Chambly canals;
- The canals under his administration include Lachine, Beauharnois and Chambly, as well as the Saint-Ours and Sainte-Anne locks.[8]

These instructions are not only clear in themselves, but also indicate the Public Works secretary's obvious intention to end the haphazard development of the board and to establish effective structures and controls. The growth of the canal system, with its implications in terms of manpower and budgets, made it imperative that the duties and requirements of vacant positions be clearly defined and that these positions be properly integrated within the organization and staffed by competent employees. The instructions constituted a statement of

principle, an ideal to be attained, and part of the program would take a long time to achieve. But there had been a change of course, the objective had been fixed and, most important, the pilot was at the helm.

Over the century, the duties of superintending engineer changed very little. Each incumbent had his particular priorities, methods and management style, but the mandate remained substantially the same. J.G. Sippell's principles or achievements are not described because they are continually reflected in the lives and the work of his employees on the canals. Little is known of his working conditions, as the documentation throws scarcely any light on this facet of his life.

He had only one employee working under his immediate supervision, at least until 1867. This man was officially designated as a clerk, but was in fact a jack-of-all-trades, as is seen from Page's description of him in 1852 as

> a person acting as clerk, chain bearer or whatever else is necessary. He has been for some time employed by the Department and is a persevering and industrious man, writes a good hand and possesses a good share of local and general information which I find on many occasions to be of great service.[9]

In 1861 Sippell refers to him again in similar terms:

> Mr. Horsnell, clerk of this Office, has been connected with the public service for some years.... Besides the duties of clerk, I have found him useful as a draughtsman, in making and copying plans, etc.[10]

This versatile employee was earning $700 a year in 1859[11] and $800 in 1867.[12] Considering the variety of services he provided, he would seem to have been the superintending engineer's right-hand-man rather than a clerk.

The superintending engineer's duties required him to spend almost as much time on the road as in his office. Except in winter, his supervisory role entailed regular visits to the sites under his jurisdiction to make routine inspections, check work, attend meetings with the superintendents and so forth. As an engineer, he was not averse to this sort of field work, but his increasing administrative responsibilities began to make the trips a burden; moreover, recovery of travel expenses was a long and repetitive process, which occasioned one of the few complaints made by the superintending engineer.[13]

John G. Sippell's salary was $2000 in 1859;[14] in 1867 he was earning $2240.[15] The figures in themselves say little, but compared with the earnings of other employees at that time, are quite significant. The 1867 pay list for the senior officials of Public Works reads as follows:

Commissioner (Hon. J.-C. Chapais)	$5000
Assistant Commissioner (T. Trudeau)	2600
Secretary (F. Braun)	1800
Chief Engineer (John Page)	3240
Engineer (G.F. Baillargé)	1800
Engineer (E.H. Parent)	912

Superintending Engineer (J.G. Sippell)	2240
Canal superintendents	1000[16]

In analysing these data, of course, it is important to remember that the civil service at that time was not governed by today's regulations, categories, standards and salary scales. It was possible, therefore, as can be seen from the foregoing list, for a superintending engineer with 15 years' service to earn a higher salary than a man who had recently been appointed to the position of secretary. Similarly, an experienced engineer with an established reputation, like John Page, might earn considerably more than a newly promoted assistant commissioner.

It is nevertheless clear from this list that J.G. Sippell was considered to occupy a key position in the department, one that called for a variety of skills, carried enormous responsibility and was physically very demanding.

The superintending engineer's subordinates at this time looked upon him as a superior and a final recourse. The new labour historians are inclined to question the thesis of a benevolent paternalism existing between employer and employees and to expect such paternalism to give way to a more strained and less friendly relationship.[17] This thesis, it is said, fails to account for strikes and the struggles of the workers. This is perhaps true in the urban and industrial milieu; however, as far as this study is concerned, the theory is borne out in the relationship that existed in the 19th century between the canal workers and the management representative, the superintending engineer. It should be remembered, moreover, that the minor rural civil servant of that era was very different from the urban industrial worker.

After the appointment of a superintending engineer, the employees at Chambly and Saint-Ours were no longer permitted to communicate directly with the higher authorities of the department; all requests and grievances had to be referred to Sippell, who acted as a sort of screening officer.[18] This arrangement, which might have been detrimental to the employees, actually worked to their advantage. A manager like Sippell, who knew each of his employees individually and took an interest in their welfare, was in a position to put forward and lend effective support to their requests, provided he considered them valid. Representations made previously by the workers had invariably been doomed to failure. Study of the various occupational groups on the canals will confirm these observations. It was an arbitrary and uncertain system, but is this not the hallmark of paternalism?

The superintending engineer's territory was enlarged in 1859 when he was assigned responsibility for the Carillon, Chute-à-Blondeau and Grenville canals.[19] These Ottawa River canals, which along with the Rideau had been constructed by military personnel, had been administered by the army Ordnance Office since they were opened. An order in council dated 3 March 1857 placed them under the control of the Board of Works.[20] It was probably in the wake of the reorganization which accompanied the conversion of the Board of Works to a department in 1859 that superintending engineer Sippell inherited the management of these facilities, with the exception of the Rideau Canal, which was incorporated with the other Ontario canals.

The superintending engineer carried on an almost daily correspondence with the local superintendents and with his superior, the secretary of Public Works. These communications from the Montreal office constitute the main source of information on the canal work force, at least until 1920. Thanks to Sippell and his successors, the daily activities on the canals come to life – in all their monotony, some might say, but for us, in illuminating detail. Once a year, moreover, the superintending engineer sent the secretary his activity report covering all the sites and facilities for which he was responsible, with particular reference to their condition, damage that had occurred, interruptions in service, repairs or construction undertaken at each location during the year ended and work that should be considered in the year just beginning, funds required, new positions, and so forth.

The annual report was compiled from information supplied to the superintending engineer by each of the local superintendents for the same period. Until 1864 the report was dated 31 December because the fiscal or administrative year corresponded to the calendar year. Beginning in 1864, in conformity with an act of Parliament, the managers' accounting year ran from 1 July to 30 June, and this became the new date for submission of the annual report.[21]

Strengthening Local Control: The Superintendent

The main result of administrative decentralization was the establishment of the position of superintending engineer of the canals. The incumbent of this position had been given carte blanche, for all practical purposes, to assess the weaknesses and deficiencies in the administrative apparatus set up in 1843 and to introduce whatever changes were necessary to make it efficient and cost-effective.

His first moves in this direction involved the local superintendents. It has already been shown, particularly in the case of Michel Borne, that the duties of these officials were ill-defined and reflected a lack of planning. The choice of candidates for these positions was equally casual. Throughout this long period, Sippell had to deal with numerous problems involving the superintendents, which were directly attributable to the administrative weaknesses of the 1840s. Only the main ones will be discussed.

Superintendents were usually selected on the basis of local support, and they generally lost no time in rewarding their relatives and friends. Hiring workers to make repairs to the canals offered an ideal opportunity for such demonstrations of gratitude. A superintendent would allot the foreman positions to his supporters or their friends and would choose the workmen from among his relatives or personal friends. Since more workers were recruited than were needed, they would sleep on the job. The superintending engineer proposed that responsibility for such work be assigned to reputable and reliable contractors under contracts that would ensure supervision of the work, compliance with deadlines, maintenance of quality standards and economy in execution.[22]

At this time, too, the superintendents were often exposed to the jealousies and manoeuvring of the lockmasters, and serious confronta-

tions were not uncommon. At the outset the superintendents were themselves lockmasters to whom certain supervisory duties were assigned. Cliques soon formed, especially at Beauharnois.

> This canal has been favoured with very indifferent superintendence; owing to this, the Lockmasters are divided into small cliques, some against each other and many against the Superintendent, producing consequences detrimental to the trade. Assault and battery, quarreling and drunkness are the order of the day.

The superintendent, moreover, was afraid to exert his authority or punish workers guilty of lack of discipline:

> The Superintendent is afraid to suspend him for fear that he, the lockmaster, may be a friend of one of the Commissioners, or that he may have some of what is called political influence. Perhaps he remonstrates kindly with some of them, and gets abused for his trouble. In fact there is a continual warfare being waged between all parties, from the Collector of Tolls down to the lockman.[23]

The situation at Chambly in 1859 was no better. P.T. Chartier, who succeeded Michel Borne as superintendent, had a price on his head, having been accused of fraud, incompetence and even immorality. Letters of accusation flooded Sippell's office in Montreal and even the commissioner's office in Toronto. Some were anonymous, some were signed with fictitious names, such as George Willett or A. Turner, allegedly of Chambly.[24]

Sippell soon realized that the superintendents, if not incompetent, were incapable of exercising their authority. He decided as a first step to weed out the undesirables and replace them, if possible, with men from outside the area, hoping in this way to reduce the pressures to which the superintendents were subjected by relatives and friends. If they demonstrated competence and integrity, the superintending engineer supported and defended them against all comers.

In February 1857, for example, Sippell dismissed the superintendent of the Beauharnois Canal, a man named Booth whose negligence (the unpardonable sin) he considered responsible for the wreck of a ship in the canal.[25] In Booth's place he appointed Pierre Laurencel, an "outsider," whom the local clans immediately set out to intimidate because he did not belong. Sippell quickly intervened to defend his protégé, describing Laurencel in his usual phrase as a "faithful and honest public servant."[26] This is a further instance of the superintending engineer's "administrative paternalism"; uncompromising with regard to dishonesty or incompetence, he would defend, even at his own risk, any employee he considered to be "an honest and faithful worker."

When Sippell placed his confidence in a superintendent, there could be no abuse of that confidence. During the ten years that Superintendent Chartier of the Chambly Canal was beset by slanderous and jealous cliques, his superior continually supported him. But when Chartier was

found guilty of drunkenness on duty, Sippell turned his back on him and replaced him by Christophe Préfontaine.[27]

Besides ensuring that his superintendents were competent and honest, Sippell sought to increase their authority, with a view to ending the disorder that had prevailed on the canals since the mid-1840s. After 1852 it was clearly established that the superintendents were to confine themselves to their own duties,[28] and there was consequently no further question of their acting as part-time lockmasters. From the mid-1850s on, the superintendents were responsible for the performance of the workers under their supervision; any instances of negligence, inattention or lack of discipline had to be reported to the superintending engineer.[29] The superintendents were later given authority to suspend forthwith any employee found guilty of neglect of duty, but when abuses crept in in this regard, Sippell imposed the condition that a report be made to him prior to any suspension.

> In all cases, I would suggest the propriety of reporting before taking the extreme measure of suspending parties. Please state the circumstances fully viz: what particular portion of the Canal Regulations he has been guilty of violating; what particular duty he has been guilty of neglecting.[30]

Strengthened by their increased authority, the superintendents now had to get down to the task of administering and supervising men and operations on their respective canals. Each new superintendent received a letter from Sippell setting forth his main responsibilities. The following instructions were issued in 1863 to C. Préfontaine, the newly appointed superintendent of the Chambly Canal:

- To obtain from P.T. Chartier, the former canal superintendent, the administrative books and papers kept in the office;
- to take over the office and residence previously occupied by Mr. Chartier at Chambly;
- to ensure, as a priority, that navigation in the canal proceeds normally, that the canal regulations are strictly applied, and that the lockmasters, bridge keepers and workmen carry out their respective duties faithfully at all times;
- to repair any damage to the canal as quickly, economically and efficiently as possible, so as to cause minimum disruption of navigation, and to submit a report on the causes and circumstances of such damage as soon as possible, by messenger, if necessary;
- to obtain instructions from the superintending engineer before undertaking repairs;
- to inspect the entire length of the canal three or four times a week, examine each section carefully, with particular attention to the mechanical structures, and report as often as necessary;
- on the first of each month, to send the pay lists and accounts for the canal to the office of the superintending engineer in Montreal, with a certificate attesting to their accuracy;
- to forward all correspondence to the office of the superintending engineer in Montreal;

- to provide properly completed requisitions for necessary supplies for the canal;
- to procure a horse and carriage for carrying out inspections of the canal.[31]

The same instructions were issued in 1858 to the new superintendent at the Saint-Ours lock, Lévi Larue, and he was asked in addition to draw up a complete inventory of tools and material on the lock site when he took up his duties.[32]

Once a year, the superintendents sent their supervisor an account of activities on their respective canals. These local reports were included in condensed form in the superintending engineer's annual report. The superintendents' reports were submitted in accordance with the schedule previously referred to and varied little in content since they followed a prescribed format

> giving a full statement of the past year's transactions and the requirements for the incoming year, viz: the repairs or improvements that have been done, the delays if any that may have been suffered by the trade, what time the navigation opened in the spring, and closed in the fall, the present state of the works and the repairs and improvements required for the incoming year with the estimated cost.[33]

Over the years, a superintendent might be assigned new duties. In 1854, for example, Sippell requested a detailed monthly report of damages caused by ships at each canal, fines imposed and payments outstanding.[34] At the end of the period, moreover, the department found it advisable to maintain a daily record of the water level at each end of the Chambly Canal; Superintendent Préfontaine accordingly had to see that the two lockmasters at the entrances to the canal kept a special register for this purpose, which he sent every month to the Montreal office.[35] These instructions also applied to the Saint-Ours lock.[36]

The superintendent of the Chambly Canal was expected to live near the lower entrance to the canal, in Chambly; however, at this time the department had no residence to offer the superintendent at this location, and he was paid a housing allowance of $100 as compensation.

The manager of a canal was, for all practical purposes, always on hand. He was forbidden to leave the site without special permission from the commissioners[37] and he was allowed no time off during the navigation season. It was only in 1864 that Sippell granted the superintendents a week's holiday between Christmas and New Year, with strict instructions not to work for anyone else while on leave.[38] This Christmas leave could not be taken for granted; the superintendent had to apply for it each year and there was no guarantee that he would get the same length of time. On 28 December 1865, for example, the superintendent of the Chambly Canal was allowed only a few days' rest.[39]

One of the superintending engineer's objectives during this period was to standardize his superintendents' salaries as much as possible. By 1867 those in charge of the larger installations, at Lachine, Beauharnois

and Chambly, were receiving $1000 a year.[40] This included a salary of $600 and a travel allowance of $400 to cover the purchase and upkeep of a horse and carriage.[41] The superintendent at Saint-Ours was paid two dollars a day, or an annual salary of $730, and was provided with a house and two acres of land. John Barrett, at the Sainte-Anne lock, was not considered a superintendent; he occupied the positions of lockmaster and collector, and in the latter capacity only, was paid a salary of $625 by the Department of Inland Revenue. The Carillon-Grenville Canal, newest in the system, trailed behind; its superintendent's salary on appointment in 1859 was $500 and he had to pay his own travel expenses.[42] In 1861 Sippell succeeded in having this salary increased by $100[43] and a few years later was able to obtain parity in both salary and allowances.[44]

The superintendent and his assistants at Saint-Ours were in a somewhat special position, and Sippell wanted their duties and responsibilities redefined. In 1859 the site was staffed by a superintendent, Lévi Larue; Jules Leboeuf, who acted as lockmaster and collector; and two lock labourers. In addition, Leboeuf was assisted in the collecting duties by a clerk, his son-in-law, to whom he paid half of his own salary of $400 a year.

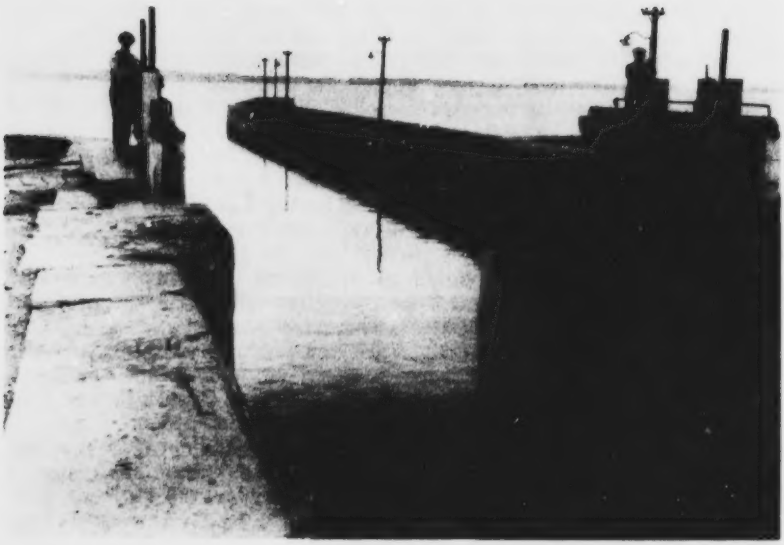
Sippell suggested to the commissioners of Public Works that one man could handle the duties of superintendent, lockmaster and collector at Saint-Ours, as was being done at the Sainte-Anne lock: "one good practical man would perform all the service now rendered by the Superintendent, Lockmaster and Collector and his Clerk for the salary now paid the Superintendent."[45] The superintending engineer's proposal evidently fell on deaf ears, for he took the matter up again in April 1863:

> I believe the tolls collected at this lock are not sufficient to pay the Collector's salary and the duties of collecting are consequently very light. Mr. Larue's duties as Superintendent are also very light, leaving him ample time to do all the work required of the Collector and his clerk. I would therefore suggest that Mr. Larue be called upon to perform the duties of Collector as well as Superintendent and Lock Master without extra pay. Mr. Barrett performs all these duties at Ste Anne's Lock for about the same salary paid Mr. Larue.[46]

This time Sippell's representations were partially successful. By 1867 there was no longer a lockmaster at Saint-Ours and the duties had been taken over by Superintendent Larue; however, Jules Leboeuf had retained the position of collector and was devoting his full time to these responsibilities.[47]

Operational Development: A Permanent Staff

Sippell was also responsible for another important innovation — the establishment of a permanent staff. During the 1840s and 1850s, it was the practice for the superintendents to dismiss the lockmasters when the



3 Lockmen at work at lock No. 1, Chambly Canal, 1935. (Public Archives Canada, C-60752.)

navigation season ended, usually around 15 December. However, there was still work to be done after the season: the canal structures had to be made ready for the winter to prevent excessive damage, the sluices and gate mechanisms had to be checked, and so on. In addition, there were always numerous repairs to be made; almost every year, for example, carpenters had to work on the lock gates.

Faced with the difficulty of finding competent journeymen at short notice in the Chambly area, Sippell in 1854 conceived the idea of setting up an operational structure that would obviate this problem.[48] His solution was to recruit as lockmasters and bridge keepers men with trade qualifications — joiners, carpenters, blacksmiths, mechanics and even stone-cutters — to employ these versatile lock and bridge tenders on a permanent, year-round basis, and to have them work on the necessary construction, repairs and maintenance during the off season.

Sippell informed the superintendent of the Chambly Canal of the official launching of the operation in November 1857, as follows:

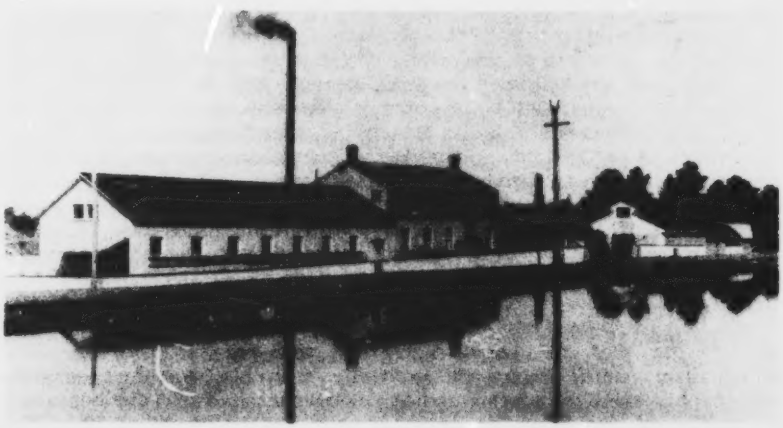
> I am directed to inform you that the Commissioners having determined on making the Lock and Bridge tenders on the Chambly canal permanent, you are to return them on the pay list from the 1st of December next at the following rates, viz:

> Lock tenders: £75 per annum; Bridge tenders: £70 per annum. At those rates, it is expected that they are to attend to any work for which they may be required, in winter as well as during the season of navigation.[49]

Thus was established the permanent staff of the Chambly Canal, consisting of 17 employees: the superintendent, nine lockmasters and seven bridge keepers. In 1867 their number was unchanged.[50] By the end of a year it was clear that the experiment was a success, and Sippell had the satisfaction of informing the commissioners that during the year the men had built two spare pairs of lock gates in addition to repairing three others and renovating a canal bridge, all under the supervision of Superintendent Chartier, himself an experienced mechanic. Sippell extolled the merits of his sytem, which he felt should be maintained:

> This is a judicious arrangement for performing the necessary service for the efficient maintenance of this Canal; each Bridge Tender is also required to render as much assistance as possible during season of navigation in repairing the Banks, Slope walls, etc.[51]

With annual salaries of $300 and $280 respectively, the permanent lockmasters and bridge keepers could not accept any outside work; their time belonged exclusively to the department that employed them and they were expected to be available whenever there was any work to be done.[52] Beginning in 1864, they were provided with the tools of their trade.[53] During the first years of the new organization, not all the permanent employees were specialists; the less skilled among them were given routine tasks in the Chambly Canal workshops while the carpenters or blacksmiths plied their trade. Before long, however, there was almost



4 Chambly Canal workshops, 1894. (Public Archives Canada, PA-85628.)

a full range of skilled tradesmen, well versed in the work of the canals and available on call.[54] Sippell had indeed taken a giant step forward in organizing work on the canals. His main ideas were to make rational use of the work force, to strive for competence and maximum performance, and to eliminate waste.

The permanent employees enjoyed other advantages. They could not be dismissed by their immediate superior, the canal superintendent. If they were guilty of serious offences, they could be suspended, but the superintendent could not discharge them since they had been appointed by the government. The procedure in such situations was suspension and a report to the office of the superintending engineer. The lock labourers and other casual employees were in a very different position; they were hired by the superintendent, who could dismiss them at will and simply notify the supervisor that there had been a change of workmen.[55]

At Saint-Ours, Félix Duval and Charles Lemay did not acquire permanent status until 1872. It is true that they were only lock labourers, the superintendent being also the lockmaster at this location. A letter from John Sippell indicates what was required of them in return for a salary of $25 a month: "these men will be expected to do any work that may be required on the works during the winter season and subject to a call at any time for that purpose."[56] The two men had previously been paid 90 cents a day as labourers, and only during the navigation season.[57] Records of this period of commercial activity on the Richelieu show that from 1853 to 1866 the Saint-Ours lock was open to navigation an average of 233 days a year, while the Chambly Canal was in service 219 days.[58] At the rate of 90 cents for each day worked, the labourers on the Richelieu canals were earning at that time an average of $210 a year at Saint-Ours and $197 at Chambly. Permanent employment and a regular salary of $300 a year thus represented a decided improvement in their fortunes.

In his continuing efforts to reorganize the structures and labour standards on the canals, the superintending engineer, not surprisingly, gave particular attention to the permanent employees. He had had to persuade his superiors of the merits of the system and of the need for the additional expenditures involved; he now had to demonstrate the soundness of his policies by organizing a productive and reliable work force. His main concern during this period, therefore, was to establish a framework of regulations, standards and control mechanisms that would ensure the employees' satisfactory performance.

In 1857, for example, Sippell set down the qualifications that would be required of lockmasters: sobriety, experience as a lock labourer, ability to read and write and to speak French and English.[59] Sippell wanted no illiterates on the locks, and he made his views clear in 1853: "I think it almost an indispensable qualification that a man in that position should be able to read and write in order to carry out his instructions and also to see that the canal regulations are not violated."[60] The bilingualism qualification, while equally desirable, was less easy to enforce; however, the superintending engineer insisted that the operators in charge of the entrance locks on the canals be bilingual. The lockmasters at these locations had, in fact, other important functions to perform in addition to operating the lock. They had to take daily depth

soundings of the canal, register these data in a log, examine the ships' passes, measure their draught, answer questions from the masters, explain the regulations, and so forth.[61] Knowledge of both languages was essential since many of the ships plying the Richelieu were American.

When it came to promotion, Sippell insisted that the lockmaster positions be filled by men with practical experience of the operations to be performed at a lock. He saw this not only as a means of obtaining competent lockmasters, but also as an incentive to the lock labourers to do their work well: "this system has a good effect on the men and encourages them to be faithful in the performance of their duties."[62] Such a concept was incompatible with the operation of political patronage. Even during this period, "protection" was a fact of life. Sippell was something of an idealist, and in 1855 he thought he could weed out this destructive practice which was gaining ground everywhere, even (or perhaps especially) in government. The tone of his letters indicates clearly what he thought of workers who resorted to this expedient to obtain jobs, promotions or increases in salary:

> I am directed to express to you the displeasure of the Commissioners in the repeated action of such an improper character being adopted by you, in urging your claims through members of Parliament and others, a course which the Commissioners expect will not be again resorted to, and to state farther than when the Commissioners are authorized, they will, without such intervention, take care that those who are deserving of it shall be duly attended to.[63]

The displeasure to which the superintending engineer referred was much more his own than that of the commissioners, who had long ceased to be exercised over such trifles.

Since 1843 a variety of practices had developed among the lockmasters and bridge keepers. Some of these Sippell tolerated, at least for a time, but others he soon ruled out. He was willing, for example, to allow an aging lockmaster in failing health to relinquish his post in favour of his son, who had undertaken to look after the old man,[64] but he would not permit another lockmaster to turn over his duties to his son in order to see to his farm, and he insisted in this case that the employee choose between the lock and the farm.[65] He did not object to a bridge-keeper's widow taking over her husband's position, provided she hired a man at her own expense for the more arduous duties.[66] Similarly, in the case of a lockmaster who had suffered a mental breakdown, Sippell made no objection to the wife's hiring a man to do her husband's work, since this expedient enabled her to support her family.[67] On the other hand, Sippell made it a canal regulation that lockmasters and bridge keepers could not own tow horses, although his predecessor, John Page, had accepted the practice.[68]

Many such examples of the superintending engineer's management style could be cited. It is particularly interesting to observe the criteria on which Sippell's decisions were based; he was always sensitive to humanitarian considerations and would overlook an occasional bending of

the rules provided this did not adversely affect the performance expected of an employee in terms of quality or quantity. He was usually careful to avoid creating irreversible precedents.

Honesty, integrity and fairness were to him the cardinal virtues. He was accordingly very strict with workers who took advantage of the slack winter season in the canal workshops to build sleighs for themselves, and with those who stayed away from work, also in the winter, to go to the races at Chambly.[69] Sippell's conception of justice, however, was tempered with understanding, and he appeared to realize the effect his decisions might have on the lives of the simple people under his authority. He had no hesitation, for example, in supporting the lockmasters' request to be allowed to sell their surplus milk to the ships' masters (most of the lockmasters kept one or two cows). Opposition to this proposal seemed to him "quite unreasonable."[70]

In line with the leave arrangements made for the superintendents, the permanent lockmasters and bridge keepers were granted a week's holidays between Christmas and New Year, beginning in 1864. The superintendents had to apply for this leave every year and the superintending engineer could either approve or deny the request. If the lockmasters or bridge keepers were granted leave, they could not use the days to work for other employers.[71] Only in case of illness could a permanent employee be absent from his work and in these circumstances he was required to provide a replacement at his own expense.[72]

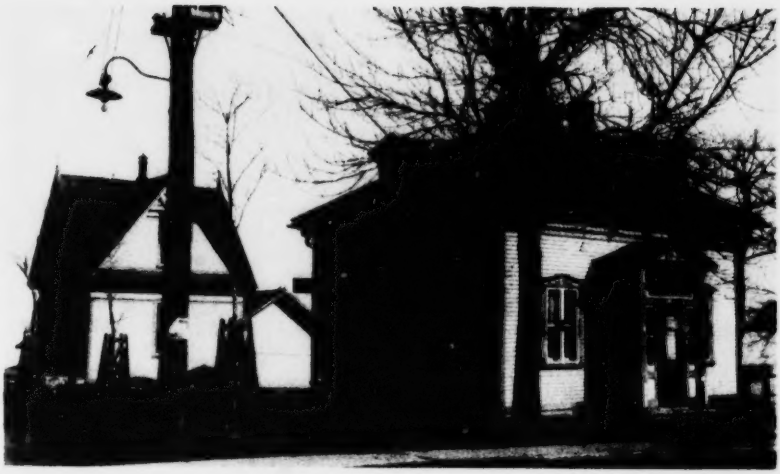
Bridge keepers and lockmasters on the Richelieu seem to have been submissive to authority, at least to that of the superintending engineer. When Sippell took up his position early in the 1850s, the lockmasters at Saint-Ours and Chambly were threatening to strike if their wages were not increased; Sippell, feeling their cause was just, recommended and obtained the desired increase, thus ending this minor rebellion.[73]

This harmonious relationship was undoubtedly due in part to the fact that Sippell was on the road a good part of the week and knew each of his employees personally. His correspondence indicates that he was as well informed about their private lives as about their work. He often intervened on his own initiative in situations that he considered detrimental or potentially harmful to his workers. On one occasion, for example, he prevented the shipping companies using the Lachine and Chambly canals from having the Sunday closing rule changed:

> There is but one set of Lock tenders at each Lock and they are obliged to work the Locks day and night during the six days, and to oblige them to open the Locks on Sunday would be considered a great hardship; these men require rest and Sunday is the only day in the week they can get it.

And when the ship operators sought to hold the lockmasters responsible for delays in navigating the locks, Sippell advised them to place the blame instead on the oversized dimensions of their boats.[74]

Another time, the superintending engineer had a new regulation adopted to counter a long-standing practice among the merchants in and around Chambly of obtaining a power of attorney from employees who owed them money and thus gaining access to their wages. Sippell could not tolerate outsiders having this sort of control over government



5 Chambly Canal office and lockmen's watch house at combined locks, Chambly Basin, 1922.

workers, apart from the fact that the practice also had "a very injurious effect on the employees."[75] This further illustrates the extent to which he involved himself in the lives of his workers and his paternalistic approach to their problems.

Although they reported to the Department of Revenue rather than Public Works, the collectors were permanent employees who might be described as part of the landscape along the canals. There was one stationed at each end of the multiple-lock canals, such as Chambly, and, of course, there was a collector at each of the single locks, including Saint-Ours. Next to the superintendent, the collector was the most important official on the canal; he usually acted as replacement in the event of the superintendent's absence, illness or even death.[76] In the early 1850s, in the absence of reliable lockmasters with the necessary schooling, it fell to the collectors, since they were stationed at both ends of the canal, to check the ships' draught, carry out the depth soundings, distribute passes to the ships' masters, and even enforce observance and application of the rules of navigation.[77]

With the arrival of Sippell, however, and the recruiting of educated and competent lockmasters, the collectors reverted to their normal role and confined their activities to collecting tolls and wharfage fees.[78] It is interesting to note that the salaries of these officials varied considerably, as shown in the following table for the year 1867.[79]

Table 1
Salaries of Collectors on Montreal District Canals, 1867

Location	Name	Date of Appointment	Salary
Beauharnois	George Ellis	17 July 1847	$ 750.00
Chambly	H. d'Eschambault	28 Feb. 1854	840.00
Saint-Jean	John Brennan	18 April 1846	720.00
Sainte-Anne	John Barrett	19 April 1849	625.00
Saint-Ours	Jules Leboeuf	9 April 1850	400.00
Port of Montreal	Alfred Gough	Feb. 1842	1840.00
Lachine	Jos. Dubreuil	May 1851	1000.00
Grenville	N. Kinninmonth	May 1838	328.00

These variations seem attributable more to the volume of traffic at the site than to the employee's seniority. There was also the fact that locations such as Chambly and Saint-Jean were terminals for many ships, while a lock like Saint-Ours was merely a way station, where a collector would have considerably less to do. Collectors who doubled as lockmasters received an additional stipend; one of these was John Brennan at Saint-Jean, whose salary of $720 a year was supplemented by the customary $300 paid to lockmasters on the Chambly Canal.[80]

We have seen that when Sippell arrived, he took steps to differentiate the lock-tending and collecting duties. At Saint-Ours after 1863 Jules Leboeuf retained only his responsibilities as collector;[81] the same fate befell a protesting John Barrett at Sainte-Anne in 1865: "his duties as Collector occupy the most of his time during the season of navigation, so he really has no time to devote to working the Lock or repairing the works further than a general supervision."[82]

In 1867 the Chambly Canal collectors occupied two offices, one at the Saint-Jean guard lock and the other in Chambly, close to the three combined locks; the first office measured 40 feet by 18, and the second, which also housed the canal superintendent's office, 38 feet by 32. Both buildings were one-storey brick structures.[83] A new residence had been built for the superintendent at Saint-Ours; this was a brick building, 34 feet by 28 and a storey and a half in height, which adjoined the old frame house (36 feet by 22) originally occupied by the superintendent. In 1867 half of this latter structure was serving as a summer kitchen for the superintendent, while the remainder had been converted to an office for the collector.[84]

6 Day labourers rebuilding a wharf at Saint-Jean, 1931. (Public Archives Canada, PA-85845.)

Other Duties and Services

Standardization, planning and organization were the watchwords of the 1860s. This is not to say, however, that by 1867 the Richelieu canal system had settled into a mould in which everything was planned and controlled. There were still organizational deficiencies that circumstances occasionally brought to light, but it is important not to interpret as oversight or expediency what was frequently simply one of the superintending engineer's pilot projects. In his continuing effort to make the most effective use of his men, particularly the permanent employees, Sippell decided, for example, that lockmaster André Hender, a skilled carpenter who had proved himself in the Chambly Canal workshops during the previous winter, should act as foreman on the canal repair barge during the summer, while his lock-tending duties were assigned to an experienced lockman.[85] The experiment was an unqualified success, and Sippell continued to select lockmasters with trade qualifications from time to time to serve as works foremen.

A number of experiments in the use of the work force were made possible by hiring temporary workers to assist in the operation of the locks. In 1862 Sippell for the first time authorized the use of lock

labourers on the canals; an exceptionally heavy navigation season had forced the lockmasters to work day and night, and they were reported to be falling asleep at their posts. The superintending engineer accordingly recommended that the commissioners authorize the hiring of two labourers at each of the locks on the Lachine Canal and one at the locks on the Beauharnois and Chambly canals.[86]

The following year, however, Sippell refused a pressing request for similar assistance from the lockmasters on the Chambly Canal:

> There is no doubt these men having been hard worked, but at the same time, the business for May and June 1862 was much greater than it has been this season; the business is now falling off and a large number of the barges trading on this route are laid up for the want of freights. Should the business increase during the months of September and October, as it no doubt will, I suggest that authority be given for affording assistance at such times as the Superintendent may consider necessary.[87]

The future *modus operandi* had just been established. The superintendents would thereafter be free to hire as many additional men as they considered necessary, for as long as required, to assist in locking ships: "this order is intended to render assistance in locking vessels when a large number arrive at or about the same time, say two or three tows in succession, so as to avoid delay to the trade."[88] In subsequent years the use of extra workers at the locks ceased to be an exceptional measure and became standard procedure during navigation. And in the superintending engineer's end-of-season instructions to the superintendents, the following sentence regularly appeared: "I need not remind you that the labourers and other casual employees must be discharged, until their services are required again for the operation of the Canal during the navigation season next year" [translation].[89] In 1867 these lockmen were paid 80 cents a day. The lockmasters were almost always recruited from among their ranks and, like other labourers employed on construction or repairs, they were hired directly by the superintendent, who could dismiss or replace them as he saw fit.

Workers needed for construction or repairs, not to be confused with the permanent staff working in the canal workshop during the winter, were also hired by the day. Every year, particularly during the summer, a large number of men were taken on by the superintendent to carry out the work decided upon by the superintending engineer and included in the annual budget. Table 2 shows the rates of pay in 1867 for the various trades and occupations involved.[90]

Table 2
Rates of Pay, by Trade, of Casual Employees on the Chambly Canal, 1867

Trade or Occupation	Rate (per Day)
Teamster (with 2 horses)	$3.00
Teamster (with 1 horse)	1.50
Foreman-timekeeper	1.50
Foreman	1.25
Timekeeper	1.20
Pit sawyer	1.25
Carpenter-joiner	1.25
Stonemason	1.25
Painter	1.25
Labourer	0.80

While there is no need to amplify the foregoing list with extracts from the paybooks of Chambly Canal employees, it might be interesting to look at the scope of the work done on the canal, particularly in the spring, in preparation for the resumption of commercial activity. The following, for example, was the work schedule for a team of casual workers during the month of April 1867:

> Pay list of all persons employed on the Chambly Canal in performing the following works: Repairing the bank from St. John to Chambly; Finishing Lapaner and Fryer's bywash and painting; Making a new wharf above lock Nº 2; Pointing lock Nº 2, 3, 4 and 5; Painting all the wooden repairs; Making the top of the sill to lock Nº 8 with oak; Repairing masonry to Bridge Nº 7; Repairing the wing wall to lock Nº 4 on the hill path; Putting 2 new sluice gates riggins to upper gates lock Nº 1; Facing with wood bridge Nº 4 and 5; Blasting stones between lock Nº 3 and 4.[91]

To carry out this assignment, the superintendent assembled a sizable work force, as can be seen from the pay list shown in Table 3.[92]

Table 3
Paylist of Casual Workers Hired to Make Various Repairs to the Chambly Canal in the Spring of 1867

Trade or Occupation	No.	Rate (per Day)	Days Worked	Cost
Foreman	4	$1.25	48.5	$ 60.62
Foreman-timekeeper	1	1.50	26.0	39.00
Teamster (with 2 horses)	7	3.00	100.5	301.50
Teamster (with 1 horse)	4	1.50	23.5	35.25
Painter	1	1.25	12.5	15.62
Carpenter	1	1.25	8.0	10.00
Stonemason	11	1.25	90.0	112.50
Labourer	107	0.80	1034.5	827.60
Total	136		1343.5	1402.09

It should be pointed out again that these were all casual workers. The superintendent could call upon them only when a particular project had been authorized by the department and the necessary funds allocated and when the permanent employees were unable to undertake the work.[93]

No discussion of the activities associated with the operation of the Richelieu canals would be complete without a reference to the men who drove the tow horses. These were the horses that pulled the barges and boats along the 12-mile length of the Chambly Canal. Less essential at the Saint-Ours lock, where towing with horses was not introduced until the early 1880s, provision of this service was mandatory at Chambly and Saint-Jean from the time the canal opened in 1843. There was a well-laid-out tow path along the Chambly Canal, which American crews considered the best in North America.

Little is known of the haulers during this period. They were mainly farmers living along the canal and teamsters from Chambly and Saint-Jean. Sippell forbade his lockmasters and bridge keepers to use their horses for towing; he even prohibited their owning horses, no doubt with a view to removing temptation. But the men who worked the locks were resourceful:

> It appears that the lockmen dispose of their horses in the spring to some member of their family, who employ them towing vessels during the season of navigation, and as soon as navigation closes, buy them back, as they always own the horses in winter. I am of opinion that these lockmen merely put their horses out of their hands during the season of navigation with the intention of evading the Canal Regulations.[94]

The stratagem appears to have been effective, for the lockmen

7 Tow horses at work near lock No. 9 on the Chambly Canal, at Saint-Jean, 1914. (Public Archives Canada, PA-85729.)

continued to pursue their extracurricular activities, and were even joined by the superintendents.

While the government provided the tow path, it was not otherwise involved in towing activities, at least at this time. The canal regulations, amended in 1857, merely stipulated that the haulers should use one, two or three horses, depending on the size of the barge or vessel to be towed.[95] It was, in fact, the owners or masters of the ships who dictated how the towing was to be done. They decided, first of all, whether they would use horses or small steam tugs. The latter were very popular with American shipping companies in the 1850s, but caused so much damage to the locks on the Chambly Canal, and consequently such delays in navigation, that they came increasingly to be replaced by horses.[96]

When the shipowners or masters, or the barge operators, opted for horses, they sometimes arranged with private haulers in Chambly or Saint-Jean to look after the towing throughout a navigation season. Usually, however, they made use of the men and horses that were available when they arrived at one end of the canal or the other. Unfortunately, no details are available of the rates charged by the haulers for their services, though it is known that they varied according to the number of horses, as was the rule with the teamsters. The amounts paid the haulers must have been quite similar to those charged by the teamsters.

Another Chambly Canal employee during this period must be mentioned, the operator at the Ile Sainte-Thérèse ferry. In the spring of 1862 the residents on the island had petitioned that a bridge be built to link them with the mainland. The department decided instead to set up a ferry service at the south end of the island.[97] The service was not inaugurated until 1864, when Joseph Langlois, who lived at the extreme tip of the island, offered to operate the ferry for $50 a year. As it turned out, he found himself being kept busy seven or eight months out of 12 and realized that his offer had been unrealistic. In the spring of 1867 he demanded $150 for his services, and on 6 July of that year, agreed to $145.[98] Joseph Langlois, like the superintendent, the lock-masters and the bridge keepers, was a permanent employee and is so listed in the *Blue Book* of the Canadian Civil Service for 1867.[99]

At the end of the 15 years just covered, the Richelieu canal system was still a relatively modest operation in terms of the length of its paylist and the size of its permanent staff. There was a limited range of trades and occupations, and few buildings or facilities provided for them over the years. Nevertheless, these were crucial years and it is for this reason that so much space has been devoted to this chapter. Great strides were made in organizing, planning and establishing of structures and standards that continued in place, for the most part, into the mid-20th century. Many precedents were created, which would serve as guidelines in the future.

In the next 20 years, to the end of the century, the focus will shift from organization to development, particularly with respect to the work force. There will be expansion, of course, but the lives and working conditions of the canal population will be changed and given new direction by very special events in the political, social and economic spheres.

Chapter IV
Expansion and Economic Crises: 1867-1896

In contrast to the two preceding clearly defined and almost unbroken periods, the next few years in the life of the canals were marked by confusion, uncertainty of purpose and even conflicting orientations. The impression we gain of these years is one of paradox, as a trend toward expansion and a climate of unrestrained optimism gave way almost overnight to a recessive turn-around of major proportions. The change could be observed at the international, national and, of course, local levels.

It would have been a paradox if these two trends or forces had manifested themselves concurrently, or had at least overlapped to some extent. Such was not the case; they followed closely upon one another, and despite hesitations and even reversals, marked a definite turning point. When such a radical change of direction occurs at a time of industrial growth, it is clear that there has been a loss of control, for one reason or another. In the case of the canals, these setbacks had all the appearance of a major economic crisis. Unlike some enterprises that succeeded eventually in regaining their impetus, the canals never recovered from these difficult times; already disadvantaged and ailing, they clung to life, only to sink gradually into stagnation. The history of the operation and administration of the Richelieu canals reflect the impact of these critical years.

Political Innovations

The promulgation of the British North America Act on 1 July 1867 gave Canada a federal government. Some six months later, on 21 December 1867, Parliament passed legislation establishing the federal Department of Public Works; its responsibilities remained essentially unchanged except for the transfer to provincial control of most roads and bridges and some public buildings. The commissioner of Public Works who had headed the department in United Canada was replaced by an elected minister. The canals, of course, remained under Public Works control.[1]

Without going into details of the new departmental organization, for all practical purposes Confederation did not change the administration of the canals, at least at the regional and local levels. On the other hand, new policies, such as the priority given railway development, undoubtedly had an effect on the future of Canadian canal systems. This, however, is beyond the scope of this study. The growing importance of rail transport within Public Works clearly led to the establishment in 1879 of the Department of Railways and Canals. Again, at the regional level, this development brought no significant administrative change.[2] The most obvious effect of the events of 1867 and 1879 was

the launching of two reconstruction projects on the Chambly Canal, the first in 1869 and the second in 1880.

A political measure, arising from Confederation, promised much more essential changes: the civil service act was passed by Parliament in 1868. Such a measure could (and should) have established hiring and employment standards, salary scales, and so forth, for all government employees. The act dealt only with civil servants working within the Inside Service, in the various departments in Ottawa. It provided for the establishment of a Civil Service Board which would review applications for employment and set examinations:

> Candidates for a government clerkship had to write a good hand, be able to spell and write grammatically, and be conversant with arithmetic and dictation. In support of the application for employment two recommendations were required, form "A" which was a certificate of medical fitness, and form "B", a character testimonial. As the Civil Service Board, including chairman and secretary, comprised any five of the deputy heads of departments, who were themselves appointed "under the Great Seal", the allocation of positions was entirely at the disposal of the party in power. In practice, unless form "B" was supported by the signature of a cabinet minister, there was little chance of a candidate being appointed.[3]

Although the Outside Service, which included the local canal workers, was not covered by the 1868 act, the comments quoted above should be remembered; these historic requirements are relevant to the problem of political patronage and hiring. For the moment, suffice to say that the Outside Service received equally short shrift in the new civil service acts of 1882 and 1908. It was not until 1918, when large numbers of soldiers were being demobilized, that legislation brought this group of public servants under the authority of the Civil Service Commission.

Under the heading of departmental reorganization and new legislation should be included the passage in December 1870 of the superannuation act, which provided for the mandatory retirement of civil servants over 65 years of age. Unlike the civil service act, the 1870 act classed as civil servants all officers, clerks and other government employees who held permanent appointments and received an annual salary.[4] With regard to salary deductions for superannuation purposes, "all salaries at and above $600. are to be taxed at the rate of four per cent and all under $600. at the rate of two and a half per cent."[5]

How mandatory was retirement? Loopholes were to be found, as Sippell explained in a letter to C. Préfontaine, superintendent of the Chambly Canal:

> By an order in Council dated the 1st December 1870, no person exceeding 65 years of age can be retained in the Civil Service of the Dominion unless by the authority of a special order in Council, obtained by a report of the Head of the Department made to the Executive Council,

> stating that such employee is fully competent to discharge the duties of his office.[6]

The complexity of these procedures might lead one to assume that exceptions to the retirement rule were rare; however, correspondence emanating from the office of the superintending engineer contains recurring examples of cases such as that of Léon Leduc, bridge keeper at the Beauharnois Canal, who was the subject of the following recommendation in 1876:

> Mr. Leduc is an old servant, having been employed in his capacity since about the opening of this canal; he is still a healthy strong man and, to all appearances, is quite capable of performing the duties of Bridge Master; as he does not wish to retire, I see no valid reason why he should not be returned in the service for another year or two.[7]

A permanent canal employee might also take early retirement. Since an application to do so could only be approved on grounds of ill health, he had to resign from his position and provide a medical certificate attesting to his unfitness to perform his duties. From the late 1880s on, the required medical certificate could be issued only by the Civil Service Commission's examining medical officer in the applicant's area. This rule was introduced to counter abuses attributable to overly accommodating family physicians.[8]

Participation in the superannuation fund was not compulsory; while most permanent employees chose to contribute, some, for various reasons, did not. When a non-contributor died, his widow was ineligible for the partial pension established in 1882 by an amendment to the 1870 act.[9] Nor did she qualify in principle for the grant of two months of her deceased husband's salary, which had also been introduced in 1882; however, once again, the regulations of this period, rigid though they may appear, admitted of exceptions and special cases. The death of Chambly Canal bridge keeper Alfred Ulric in 1892 is a case in point:

> The deceased has been in the service close on six years, having been appointed on the 1st of March 1887; he has been a faithful officer and leaves a widow in poor circumstances. He was not however a contributor to the superannuation fund and on that account, objection might perhaps be raised to granting the widow the customary allowance of two months gratuity of her late husband's salary.
>
> But I consider that since the said gratuity has already been allowed in similar cases, I am justified, in the present instance, in recommending the granting of two months pay to Mr. Ulric's widow.[10]

The reconstruction of the Chambly Canal in 1869 and again in 1880 reflected not only the favourable political climate engendered by major administrative reforms, but also a relatively prosperous economy. It is not surprising, therefore, that the social reforms just referred to

occurred at about the same time, in 1870 and 1882. They would not have been possible after the 1870s, at least not after 1873.

Economic Crises and the Workers

The year 1873 brought a major economic crisis, the effects of which were felt in Canada and the rest of the world until 1878. "No crisis in Canadian history, except that of 1930, had so severe an immediate effect or such lasting consequences" [translation].[11] While its causes are of little interest to us, it was attributable apparently to "the impact of a cyclical decline in the American economy and the policy of interdependence linking the Dominion and the United States" [translation].[12] Its short-term consequences in Quebec were disastrous; several banks closed their doors, exports out of the port of Montreal fell by 25 per cent in 1875, 310 industries ceased operations in 1874, and more than twice as many in 1875. These business failures coincided with an influx of American goods into Canada, which resulted in even more failures. Unprotected Canadian industry was no match for its American competition; petitions for increased tariffs poured into Ottawa.[13]

In social terms the effects of the recession were equally devastating: high unemployment, especially in the cities, emigration of workers to the United States, lowered wages (those of the stonemasons, for example, dropped by 60 per cent), violent strikes and confrontations with police, riots, and the like.[14] In December 1877, for example, 1200 labourers engaged in excavation and other work on the Lachine Canal went on strike, demanding a daily wage of a dollar and a nine-hour day; the contractors refused and suspended operations. Violence erupted, with the strikers firing on the contractors and their foremen. The local police admitted that they could not guarantee the safety of the employers or their representatives.[15] Such events and the chaos they reflected were a sad contrast to the economic situation immediately following Confederation. Quebec industry had seemed to be benefiting from an expansionary trend and farm prices had risen by 20 to 30 per cent between 1870 and 1873. There were still economic difficulties, some acute, but the signs were favourable.[16] How were these two periods, so close together and so vastly different, experienced on the canals, particularly the Richelieu? What effect did the expansion and the recession have on them? What were the attitudes and policies of the canal administration after the crisis, during the 1880s and 1890s?

On the canals one of the most telling indicators of the economic climate at any time was the amount of reconstruction under way. The expansionist trend that followed Confederation soon spread to the Chambly Canal; the few repairs made between 1848 and 1860 had done little to improve the canal structures and most of the locks were in need of at least partial reconstruction. Unfortunately, this work, though extensive, was not undertaken with any view to permanence; the proposal for a direct inland route between the St. Lawrence and Lake Champlain was still under consideration and there seemed little future for the Richelieu canals. The fact that substantial amounts were

invested in reconstruction of the Chambly Canal in these circumstances says much about the free-spending mood of the time.[17]

During this period, moreover, there were numerous salary adjustments and increases; the lock labourers reached a dollar a day,[18] and the lockmasters and bridge keepers $365 a year.[19] These increases were often dictated by the need to remain competitive with other employers. Workers who were offered higher salaries and shorter working hours in the private sector tended to be unreceptive to government offers and occasionally even gave up their employment on the canals.[20]

New positions were set up quite freely – that of carpentry and works foreman being an example[21] – and duties previously performed by one employee were divided. The dual position of lockmaster and toll collector was thus abolished wherever possible, and the responsibilities assigned to two employees.[22]

Even more indicative of the climate of this period was the decision to proceed with the construction of new buildings, in seeming disregard of the danger that the days of the Richelieu canals were numbered. The building of houses for the lockmasters and bridge keepers was a particularly striking illustration. There were now nine lockmasters and nine bridge keepers on the Chambly Canal, of whom only four were provided with houses. Sippell decided that in fairness, as well as for operational reasons, the 14 workers were entitled to houses. Five lockmasters' residences were built initially at a cost of $874 each, exclusive of the amount paid for expropriation of the necessary land; the first four of these were completed in May 1871, and the fifth shortly afterward.[23]

The economic recession of 1873 also left its mark on the canals in various ways. This crisis, which had developed in Europe, did not begin to make itself felt in Canada until 1874. Building activity came to a complete halt from 1874 to 1878 or even 1879. Not a single building was erected on the Richelieu canals during this period; the five lockmasters' houses had been completed before the recession, but the rest of the program, comprising construction of the nine bridge-keepers' houses, was promptly cancelled. The bridge keepers complained and filed petitions, maintaining that their watch houses were inadequate and uninhabitable; that they had been standing nearly 40 years and were no longer proof against the rain and snow, which came in from all sides; that they had as much right to new houses as the other permanent employees. These demands were strongly supported, moreover, by the superintendent of the Chambly Canal,[24] but to no avail. Even the support of the superintending engineer, who pointed out that the houses could be built by the permanent employees themselves in the canal's winter workshop, failed to alter the decision.[25]

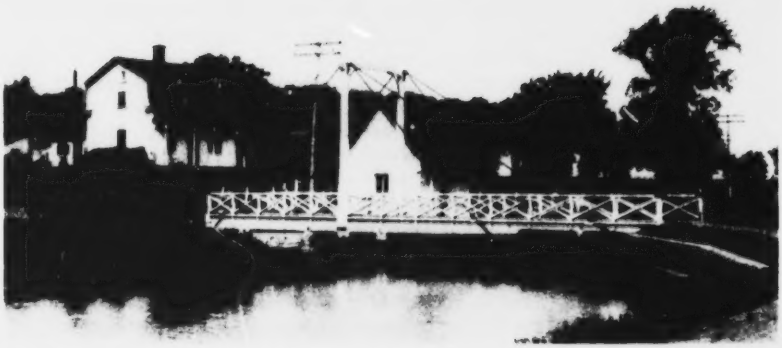
Requests for pay increases were, of course, futile, even when put forward as parity adjustments.[26] However, in these critical times the workers clung to any hope, even the most unrealistic; thus the canal labourers petitioned to be paid a winter stipend, a privilege enjoyed only by the few permanent employees.[27]

There were also efforts to restrict the number of workers as much as possible. The superintendents were given strict instructions to hire lock labourers only when commercial activity so required.[28] In the same

8 Lockmen's watch house at the combined locks at Chambly Basin, 1904. (Public Archives Canada, PA-85644.)

vein, an old canal regulation, which had never actually been applied, was revived, requiring the master or operator of a vessel or barge to provide at least two men to assist the lockmasters and bridge keepers in their operations.[29] In contrast to the trend of the preceding period, ways were sought to combine positions,[30] or dispense with the services of casual workers previously considered essential. Toward the end of 1877, for example, the Chambly Canal had a new superintendent, Louis Ouimet. The fact that Ouimet was a carpenter by trade seemed to the department sufficient justification to dismiss François Chaloux, a former lockmaster who had been promoted to carpentry foreman in 1873 and who had the misfortune to be receiving in that capacity the lavish salary of $75 a month. It was true that Chaloux had forfeited his permanent status when he accepted the new assignment, but he had been promised continuous employment, 12 months a year.[31]

Adding to the hardships of this difficult period was the continuing freeze on new positions. While such a policy was understandable in the circumstances, it paralized operational development on the Richelieu canals until the early 1880s. The superintendents at Saint-Ours and Chambly were asking for more employees: a warehouseman to supervise and control tools, equipment and material;[32] a timekeeper and checker to calculate the hours worked by the men and maintain the registers;[33] a



9 Bridge keeper's watch house and residence at bridge No. 4, Chambly Canal, 1904. (Public Archives Canada, PA-85621.)

caretaker and lamplighter to see to the two canal lights at Chambly.[34] All of these requests were refused.

The crisis of the mid-1870s resulted in even more serious consequences than those just described. The anxiety, anger and frustration of the unemployed and underemployed workers soon gave rise to an unhealthy climate of hatred and jealousy, accusations and intimidation, particularly along the Chambly Canal. The superintending engineer's official correspondence contains many examples: a toll collector is denounced because he is holding down a second job, although he is paying a clerk to replace him at the canal.[35] The superintendent at the Sainte-Anne lock is accused of moonlighting as a hauler,[36] the collector at Saint-Jean of arriving for work under the influence of alcohol,[37] the ferry operator at Ile Sainte-Thérèse of collecting fares but refusing to carry passengers,[38] various lock and bridge tenders of incompetence or negligence. A veritable flood of accusations and denunciations burst over the canal workers, particularly the permanent employees. The malaise seemed clearly a consequence of the economic situation, for there had been practically no previous evidence of it among the canal workers (at least on the Richelieu).

The superintendents and the superintending engineer in Montreal usually tried to protect and exonerate the employees who were the targets of these frequently anonymous attacks. Sippell's replies almost always ran along such lines as the following:

> I have often informed the Department that Mr. Nolin is a reliable Lock Master and I consider him to be fully as reliable in the performance of his duties as any one recommended by certain men who desire his removal to replace him by no better man. Lock Masters are often persecuted by men in peculiar positions.[39]

The campaign of vilification reached its height in 1878 and 1879. Accusations of misappropriation of funds, incompetence, abuse of authority and fraudulent election activities were even levelled at Superintendent Ouimet himself. The matter seems to have been exaggerated, but unfortunately for Ouimet, he was not entirely guiltless, and this time Sippell had to suspend him.[40] His dismissal by the government in May 1879 provoked a major confrontation between his defenders and his accusers. "The Chambly Canal affair," with its aura of political partisanship and patronage, reached the pages of the Montreal newspapers, where it gathered momentum.

It is generally agreed today that the recession came to an end in 1878; however, national and international prosperity did not actually return until 1896, when industrial activity in the western world began to show substantial growth and prices at last picked up. Between 1878 and 1896 Quebec experienced a series of ups and downs. A few years of "moderate economic prosperity" were followed by a new world crisis (affecting particularly the banks) from 1883 to 1885; however, this setback was less acute than the previous cataclysm and affected Quebec to a lesser extent because its economy was "not yet fully integrated with that of the major western powers" [translation].[41] Nevertheless, businessmen and financiers, for whom the bankruptcies of 1874 and 1875 were still a sobering memory, adopted an extremely cautious approach during these years. From 1885 to 1887 there was some modest growth in Quebec despite continuing recession in the western countries. This was followed by new contractions in 1888 affecting agriculture and the timber trade in particular:

> A new trend developed in the lumbering sector. New England, Quebec's principal outlet, was now buying its wood in the southern United States. This was a severe blow to Quebec's timber trade in that exports of squared timber fell to a very low level in 1894 and 1895. [Translation.][42]

The year 1888 is of particular significance in that from an administrative point of view, it was to mark another turning point for the canals. This new change of direction on the Richelieu must be viewed, moreover, in the light of the business developments referred to above.

How perceptible on the Richelieu canals were the end of the recession in 1878 and the recovery that began in 1879? What of the further slump between 1883 and 1885? From the point of view of construction, signs of recovery were already apparent in 1879. The perennial question of accommodation for the bridge keepers immediately resurfaced, and it was decided that pending the provision of houses for these employees, they would be paid a rental allowance of $30 a year.[43] Construction of these residences, which included an adjoining summer kitchen and were valued at about $1250 each, began in 1880[44] and was completed by the end of 1882.[45] In addition, ten watch houses for bridge keepers and lockmasters were built during the winter of 1882, including one (of a larger size) for the staff of the combined locks at Chambly.[46] Finally, in 1883, a canal office was fitted up beside the wharf in Saint-Jean, and a new carpentry shop was built at Chambly.[47]

Activity came to a halt again during the recession of 1883, but resumed slowly in 1885 with the construction of various small buildings — sheds, stables for tow horses, storage for lock gates, and so forth.[48] One of the larger projects was the building of a blacksmith shop in Chambly in 1887.[49]

For a number of workers the end of the recession in 1878 meant long-awaited salary increases. Joseph Langlois, the ferry operator at Ile Sainte-Thérèse, was granted, in addition to a rental allowance, a pay rate of $1.25 a day, representing parity with his opposite number at the Beauharnois Canal.[50] The daily rate for lock labourers rose to $1.25 in 1882.[51] The following year the superintendent of the Chambly Canal received an increase of $100, bringing his annual salary to $1200.[52] From the summer of 1885 on, however, all requests for increases were refused.[53]

Recovery also meant an end to the freeze on new positions and temporary hiring. While examples of this development could be cited, it is perhaps more important to record that it also came to a halt in 1883, directly reflecting the fluctuating economy of the time. Thus from 1878 to 1883 the superintendents enjoyed a free hand with regard to hiring workers, particularly lock and bridge labourers.[54] During this period also, François Chaloux, the carpentry foreman whom it had been proposed to release during the recession, received confirmation of his value to the department by being made a permanent employee.[55]

The second economic crisis to break over the country in ten years did not have as devastating an effect as the first; financiers and businessmen had no wish to relive the chaotic conditions of the mid-1870s, and their caution undoubtedly cushioned the shock of the 1883 recession. Along the Richelieu the modest expansion initiated in 1878 was damped down and the canals again felt the pinch of retrenchment. But worse was to come. All hope of recovery was extinguished by a third blow which fell in 1888 with particularly dire consequences for the Richelieu canals. Canadian exports of wood to the United States were seriously affected, and such was the impact of this development on navigation on the Richelieu that questions were raised as to the future usefulness of the canals. It is not surprising, therefore, that during the remainder of this period, from 1888 to 1896, a particularly stringent administrative policy prevailed. Once again the casual workers were the first to go; nine lock labourer positions were abolished.[56] To offset this loss the engineering superintendent, E.H. Parent, suggested applying clause 27 of the canal regulations, which stipulated that the master or operator of a vessel should provide at least two men to assist the lockmasters and bridge keepers on the canals: "this would apply more specially to the Richelieu River works where navigation is of far less importance than on the St. Lawrence Canals, owing to the decrease in the trade on this route."[57] If this assistance proved insufficient, the bridge keepers posted near the locks were to be called upon to help with the locking.[58]

In this atmosphere even the permanent employees became uneasy about the security of their jobs, sometimes with reason. In 1889, for example, the Department of Railways and Canals decided as an economy

measure to turn over the supervision and operation of the Langelier Bridge at Saint-Jean to private enterprise. The bridge keeper, Edouard Marcoux, received a severance allowance of $150.[59] Three years later, in 1892, with no end to the recession in sight, Ottawa even considered revoking the lockmasters' and bridge keepers' permanency on the grounds that the cost of this special status could not be justified. The superintending engineer and the superintendent of the Chambly Canal protested vigorously, pointing out the exceptional services rendered by the men and the substantial savings achieved as a result of their permanent status:

> If our permanent employees were engaged for the season of navigation only, as it has been suggested, it is doubtful whether we could secure the services of competent men for seven months only. Admitting the thing could be done, we would be compelled to pay them dearer for winter work or they would seek work elsewhere and then we would be obliged to take in their place unexperienced workmen who could not be controlled as easily as men employed the year around. In my humble opinion, it is in the interest of the Government to continue the present system, at least on the Chambly Canal.[60]

The department reluctantly abandoned its proposal, but went on with its cost-cutting measures: "in future, permanent staff are to be employed only during regular hours; it is very difficult to get approval for extras from the Auditor General" [translation].[61]

The smallest expenditures were scrutinized and questioned. In 1889 Superintending Engineer Parent had to invoke every possible precedent and justification to retain for Alfred Coderre, the superintendent at Saint-Ours, the allowance of 25 cents paid to him for every trip he made to the post office; unlike the other superintendents, Coderre received no allowance for the hire of a horse although his office at the lock was a mile and a half from the village.[62] This illustrates, incidentally, that despite the efforts made by superintending engineers since the early 1860s, the principle of equal pay for equal work was not yet established in 1889. The department seemed to believe that employees attached to minor sites like the Saint-Ours and Sainte-Anne locks had less work and fewer responsibilities than their colleagues at Chambly, Beauharnois or Lachine, and should not therefore enjoy the same benefits.

Another important consequence of the decline in commercial activity in 1888 was an effort by the government to economize by mobilizing skills. The theory was that with a young, competent, specialized team of permanent employees, healthy and anxious to work, fewer casual workers would be needed on the canals and substantial savings could be achieved. This policy was suggested in 1888 by Superintending Engineer E.H. Parent, who appears to have given it top priority:

> The increased expenses in connection with the Chambly Canal staff are attributable to the in-

> competency of some of the permanent employees on said Staff.
>
> All the Bridge and Lock Masters, seventeen in number, are obliged to work during the winter months in the canal workshops; several of them are so aged and weak that they are unable to effectively perform their part of the work. The Superintendent is therefore compelled to hire carpenters outside, to whom he is obliged to pay higher wages, and frequently, during season of navigation, has to provide helpers to replace them.

Parent went on to estimate the cost of these replacement workers at some $2000 a year and to suggest, by way of illustration, the names of four permanent employees who should be retired; the first three were lockmasters, aged respectively 72, 73 and 71. The fourth, a bridge keeper, was only 52, but was in poor health. All had at least 20 years' service on the Chambly Canal. There were several others, according to Parent, who should be similarly dealt with as soon as possible, "their work being null."[63]

The adoption of these criteria meant, moreover, that the old custom of allowing a son to succeed his father as lockmaster or bridge keeper would no longer be followed unless, of course, the son possessed acceptable experience and a trade that could be of use in the workshops, preferably that of carpenter or blacksmith.[64]

It is important to look at the official statistics of activity on the Chambly Canal during these difficult years because the figures for this period can be interpreted in different ways.[65] The totals, in terms of annual tonnage of goods carried at Chambly, do not always reflect the economic fluctuations just discussed. The outer limits of the recession which persisted almost throughout the period dealt with in this chapter can be seen:

Year	Tonnage
1871	549 442
1873	260 407
1894	277 608
1897	352 136

From 1874 to 1893, however, the average annual tonnage carried on the Chambly Canal remained relatively stable at 221 000 tons (except for a drop to 157 288 in 1878). In this perspective, for example, the activity recorded in 1888 (241 753 tons) did not reflect the serious reduction in timber exports in that year and consequently did not justify the drastic administrative measures introduced on the Chambly Canal between 1888 and 1896.

One trend the statistics did reveal clearly was the growing "Americanization" of the canal, as Canadian ships gave way increasingly to American vessels:

Year	Canadian Vessels	American Vessels
1867	4295	933
1870	5427	1184
1873	2450	1453
1876	1329	1146
1886	1031	1112
1888	974	1303
1894	893	1599
1898	753	1588
1900	664	2177

This trend was to continue during the first two decades of the 20th century and in 1914 the ratio would be recorded as 488 Canadian ships to 2348 American. It is perhaps in this light that the decline in commercial activity on the river from the 1870s on should be viewed. This situation may well have prompted the canal administrators' extreme caution and the rigorous measures they adopted.

The years from 1873 to 1896 represented roughly a quarter of a century of economic recession, broken only occasionally by abortive movements toward recovery. In attempting to discern how this difficult period, with its successive upheavals, affected the Richelieu canals and what its consequences were for the workers, the approach adopted in the preceding chapters had to be altered and examples provided to illustrate the social and economic phenomena we have observed. As a result, the operational and administrative work force of the Richelieu canals during this period is now in many respects familiar ground; however, it will be useful to look at this group of workers again with a view to tracing the development and the particular features of their various duties and occupations.

Regional and Local Management

At the beginning of this chapter the administrative changes that occurred during this period at the national or departmental level were discussed. Now the alterations in the organization of the regional office for the canals, located at the eastern end of the Lachine Canal, should be examined.

In 1867 this office was under the direction of the superintending engineer, J.G. Sippell, who was assisted by one clerk. Sippell died in September 1879 and in 1892, toward the end of this period, the position of superintending engineer was occupied by E.H. Parent. Parent had a staff of four:

1. L.A. Lesage was secretary-accountant; he had been taken on as a clerk in 1871 at a salary of $60 a month and was now receiving $1400 a year. "Mr. L.A. Lesage fulfils the duties of Assistant to the Superintending Engineer; as such he is entrusted with the preparation of all the correspondence of the office, the inspection of the monthly returns sent in by the Superintendents, the audit of same, and has the general control of the office work pending the absence of the Engineer on tours of inspection."[66]

2. A. Duchesneau was a clerk. He had entered the civil service in 1872 and was now paid $1200 a year. "Mr. A. Duchesneau performs the duties of Clerk and general assistant at correspondence, accounts, records; also entrusted with the writing of the correspondence prepared by the Engineer or Secretary."[67]
3. L.E. Trudeau, also employed as a clerk, had been in the service since 1875 and was earning $1000 a year. "Mr. L.E. Trudeau keeps indexes of the correspondence received, of plans and official records; he also occasionally acts as Assistant on Surveys when required."[68]
4. John Moore, who had been in the government's employ since 1865, was a messenger, earning $38 a month. "John Moore was up to five years ago employed on the Lachine Staff list as Storeman and Messenger, and since has performed service as Messenger and Caretaker for these offices."[69]

The office was open from 9:30 a.m. to 5:00 p.m. six days a week, "sufficient time for lunch being allowed."[70] Parent, whose watchwords were competence and economy, was not prepared to see any reduction in his office staff. They were all, he maintained, hardworking and quite indispensable.

There had been little change in the duties and responsibilities of the superintending engineer. It may be interesting to read the incumbent's own description of them in 1892:

> The duties of the Suptg. Engineer consist in the general supervision and control of the management of the canals, advising the Superintendents as to the best, most efficient and economical mode of effecting the works of repairs or construction.
>
> He also has to control the expenditure of the amounts appropriated each year under the heads of Capital, Income, Collection of Revenues, and see that said amounts are expended for the object for which they are voted, and for this purpose is obliged to inspect from time to time the different works under his control.
>
> To the above duties must be added the office work which is considerable, such as correspondence with the Department, making reports on all matters submitted and giving his opinion as to the course to pursue, as the case requires, supervising the office work of the different employees such as plans, specifications, monthly returns, and the correspondence between his office and the several superintendents and the general public.[71]

It should be explained that in February 1879 administrative responsibility for the Ottawa River canals had been transferred from the canal office in Montreal to a superintending engineer stationed in Grenville.[72]

It was not easy for even senior officials to obtain salary increases in these depressed times. Sippell was earning $2240 in 1867 and by 1873 his salary had risen to $3000.[73] There was no change in this rate until

10 Canal superintendent's office at Chambly Basin, 1894. (Public Archives Canada, PA-85615.)

1892.[74] It was not a tragic situation, but once again, the concept of poverty is relative.

One might feel more sympathy for Lesage, Duchesneau, Trudeau and Moore, the employees in the regional office, who, as they said themselves, were faced with the sharply rising cost of living in Montreal. From 1887 on, their pleas became increasingly insistent, but to no avail.[75]

At the local level, the superintendents' supervisory responsibilities increased during this period, since it fell to them to maintain service on the canals with ever-diminishing financial and human resources. Supervision became even more rigorous on the Chambly Canal in 1880 when the department, encouraged by a slight upturn in the economy, undertook the long overdue reconstruction and repair. This work could no longer be postponed, the locks having deteriorated to the point of being hazardous to navigation and to the employees. Soon, however, there were new signs of recession and work on the canals was reduced to the most urgent repairs. The remainder of the project was carried on from year to year, as budget appropriations allowed, until 1898.[76]

Except for the climate surrounding this undertaking, it was a type of work to which the superintendents were quite accustomed. The duties of the officer in charge of a canal between 1867 and 1896 were substantially the same as during the preceding period; Sippell had developed position descriptions which had become virtually institutionalized, so that the day-to-day and seasonal activities of a superintendent were largely predetermined. From time to time he might be assigned

additional duties, as was the case in 1870 when the superintendent of the Chambly Canal was asked to assume to some extent the responsibilities of harbour master at Saint-Jean. In this capacity he was required to supervise the occupancy of the wharves, ensure that they were not cluttered with merchandise, levy wharfage fees and, if necessary, impose fines.[77] This arrangement, however, proved unrealistic since the superintendent's obligations at Chambly did not leave him time to deal effectively with the duties of harbour master. In 1872 it was decided to appoint a full-time harbour master.

During this era of economic instability and social unrest, the position of superintendent was not an easy one. The incumbents were often the targets of accusations and denunciations of various kinds. Their discretionary authority to select casual workers gave rise to animosity and jealousy. In 1878 this prerogative was withdrawn and lock labourers and other employees paid by the day were thereafter appointed by the department; however, on the recommendation of the Montreal office, it was arranged that candidates would be notified of their hiring by the superintendent, for reasons of disciplinary control:

> Notice of such appointment should be given to the party so appointed not directly to himself but through the Superintending Engineer and Local Superintendents. It is found that when lock or bridge laborers receive official letters of appointment directly from the Department, the Local Superintendents have much less control over them and more difficulty in enforcing orders.[78]

Another factor that weakened the authority of the superintendents was the local population's dislike of outsiders, particularly in country areas. The appointment of other than an area resident to any position was resented. The recession exacerbated this attitude since it was felt

11 Superintendent's house and office at the Saint-Ours lock, Ile d'Avard, 1903.

that local workers had a right to the few jobs available in the area. In 1879 when Louis Ouimet was relieved of his duties as superintendent on grounds of fraud, an outsider, Cornelius Ulrich, was appointed to the position. Ouimet was not universally admired in the Chambly area and in fact had a number of enemies, but the arrival on the scene of a "German teamster" provoked a storm of protest and the newspaper *La Patrie* strongly opposed the appointment.[79]

In 1885, well before the official resignation of the superintendent at Saint-Ours in 1888, confrontations developed over his replacement. Political protection, or patronage, obviously loomed large in such disputes, as elsewhere, at this time. A closer look at this phenomenon will be taken in the next chapter. For the moment, suffice to say that the politicians of the day not only strongly supported the insular attitudes of the local residents, but also even refused to provide the required recommendations for appointment in the case of outsiders. In 1885 the superintending engineer, in line with his policy of developing a competent staff, proposed to appoint an experienced employee from the Lachine Canal to succeed Superintendent Larue at Saint-Ours. Alfred Coderre, the local candidate, was a pilot on the Richelieu and a native of Saint-Ours, but had no experience in the operation or administration of a canal. Bolstered by the official support of the member of Parliament for Richelieu, L.-H. Massue, who made it plain that "he would not consent to recommend the appointment of anyone outside his county," Coderre was the winner in the contest.[80]

As far as the superintendents' salaries were concerned, obtaining any increase during these years meant an endless series of requests and petitions. The case of the superintendent at Chambly is an illustration: his salary in 1867 was $1000 a year, exclusive of a $100 housing allowance; it was increased successively to $1100 in 1876, $1200 in 1883 and $1800 in 1896. There it remained until the end of the period. The final increase, a substantial one even though it included the housing allowance, coincided interestingly enough with the appointment of the former MP for the area, P.B. Benoit, to the position of superintendent of the Chambly Canal.[81] The suspicion of a cause-and-effect relationship is difficult to avoid.

The superintendent of the Saint-Ours lock was less successful in his efforts, even with political support. In 1867 his remuneration was two dollars a day, or $730 a year; in 1892, 25 years later, it was unchanged. The main reason for this anomaly was the department's view that the superintendent at this site was merely a lockmaster with a few minor administrative duties.[82] It was considered, moreover, that the salary differential was more than offset by other benefits:

> The Superintendent of St. Ours Lock, besides his salary of $730 per annum, is provided with a residence which is erected on Government land, between the Lock and the dam. A portion of this building is set apart for an office wherein he keeps all his books, papers, records and correspondence and which is lighted and heated at Government expense and kept open the year around, the same as on all the other canals.[83]

In these years, however, particularly meritorious service could be recognized through the award of special bonuses not provided for in the regulations. When Lévi Larue left his position as superintendent of the Saint-Ours lock in 1888, for example, the government, in consideration of his 30 years' service, credited him with an additional five years' employment, thus giving him entitlement to a retirement allowance based upon 35 years' service.[84]

Lockmasters and Bridge Keepers

Each lockmaster had by the end of this period been provided with a house with an adjoining summer kitchen, constructed on a fenced lot large enough to accommodate a garden. What had prompted this generosity toward the lockmasters and later the bridge keepers?

> The trade for the past year was greater than any former season; for days and weeks, the locks were taxed to their full capacity. It therefore now becomes necessary that the lockmasters should be provided with lodgings at the locks, more or less delay being caused from the necessity of their leaving the locks to go from a half to three-fourths of a mile to get their meals.[85]

The regular lockmasters were permanent employees. During this period,

12 Lockmaster J. Lynch in front of his house at lock No. 4, Chambly Canal, 1929. (Public Archives Canada, PA-85660.)

therefore, except for the short time in 1892 when the department was considering the abolition of permanent positions, their main concern was salaries.

From $300 in 1867, the salary paid to lockmasters had risen to $365 a year when the recession occurred in 1873.[86] In August 1881, on the strength of a modest economic recovery, the rate was increased to $38 a month or $456 a year,[87] where it remained until the end of the period. The lockmaster at Saint-Jean was in a special position. As assistant toll collector, he received $200 a year from the Department of Inland Revenue; his salary as lockmaster in 1873 was $400 a year. The reason for this privileged status was that his isolated position at this end of the canal made him more an assistant to the superintendent than a lockmaster:

> Within a space of 500 feet stand the Guard Lock, the Northwest and Atlantic Railway bridge, the Jones' foot passenger and carriage bridge and the Langelier's bridge. Partly owing to the proximity of these structures to each other and to the narrowness of the Canal at Jones' bridge, jams frequently occur, necessitating prompt and decisive action on the part of the lockmaster.[88]

The lot of the lock labourers was a much more uncertain one in these years because their chances of employment fluctuated in direct ratio to the state of the economy. The ups and downs of their activity on the canals will not be detailed. Disappearing almost entirely at times, they would return when business improved, their numbers varying according to the requirements at the different locks and the restrictions currently in effect. In 1878 there were only nine,[89] while in 1886 they were sufficiently numerous to be organized into two teams, sharing three eight-hour shifts with the lockmasters on an alternating or rotating basis. This arrangement made it possible to keep the canal in operation 24 hours a day, as the increased activity at that time required.[90] The shift system, which Sippell would have liked to be able to introduce in the 1850s and 1860s, was used whenever possible and appeared to be the key to the efficient operation of the canals.[91]

Unlike the permanently appointed lockmaster, the lock labourer, as his title suggests, lived from day to day. If he fell sick, he was obliged to supply a replacement at his own expense in order to keep his job.[92] Like other casual workers, he was at the mercy of political patronage; he had no hope of being hired unless the local MP recommended him. Nor was there any prospect of long tenure if the opposing party came to power. And although after 1878 a superintendent no longer had authority to hire casuals, there could be no question of getting work on the canal without this official's concurrence. The Montreal office was not only aware of these practices, but also condoned them. In 1883, for example, the secretary in the canal office wrote to the superintendent of the Saint-Ours lock about hiring a new lock labourer:

> I am directed to send you for report official letter Nº 60791 containing the names of various persons who have made application to the Department to fill the vacancy created by the death of Joseph

> Lachambre, lock labourer at the St. Ours Lock, and to ask you which of these applicants is best qualified for the said position. It would be advisable to ask the opinion as well of the federal member who controls these appointments. [Translation.][93]

The last sentence makes the message clear and removes any hope of recruiting the most competent candidate.

A change of superintendent at a canal could result in the departure of a number of lock labourers and other casuals. In this era of patronage, the superintendents in their turn tended to surround themselves with their followers, with the result that when a superintendent was replaced, his favourites rarely survived. If the Montreal paper *La Patrie*, for example, can be believed, the dismissal of Chambly Canal superintendent Louis Ouimet in May 1879 had serious consequences for several of his workers: "ten junior employees working at the same canal were discharged, though no complaint had been made against them" [translation].[94]

Strangely enough, the lock labourers and their permanent counterparts were nearly always on a par in terms of earnings per day. In 1867 a lockmaster earned $300 a year with a house or a housing allowance of $50. At the same time his assistant, on the basis of 90 cents a day, was receiving $210 for a 219-day navigation season. In the summer of 1871 the wage paid labourers on all the canals was increased to a dollar a day.[95] In May 1882, during a brief upturn in the economy, the rate for lock labourers rose to $1.25 a day,[96] matching exactly the $456 a year earned by the lockmasters.

In 1888, for reasons of administrative convenience, the department changed its accounting base and converted the remuneration paid to both permanent and casual employees to a monthly rate, without altering the overall amount. Under the new system, the lockmasters received $38 a month or $456 a year, and the lock labourers also earned $38 a month, but only for seven months.[97] The lock labourers, though casual employees, were in fact hired for the duration of the navigation season. This clarification was necessary to understand the new administrative language of the Department of Railways and Canals. The statement of canal personnel for 1892 uses the monthly rate of pay, showing lockmasters, lock labourers, bridge keepers and bridge labourers on the same basis of $38 a month.[98]

The reason for this parity was to be found mainly in the competition represented by private contractors, particularly in a period of economic recovery. The superintending engineers of the canals made frequent reference to this factor, which was the basis for the increase given the casuals in 1871:

> The Lock Labourers will have to be paid at the rate of one dollar per day as there is now great difficulty in getting good men for less. The contractor is paying even more than that for ten hours work, and these men must be on duty the entire 24 hours.[99]

It was to be an oft-repeated argument until the end of this period. When

13 Bridge keeper's watch house and residence at bridge No. 9, Chambly Canal, 1934. (Public Archives Canada, C-70830.)

times were good, the law of supply and demand was on the side of the casual workers.

The Saint-Ours lock was always a special case. The superintendent doubled as lockmaster, and the two lockmen were labourers. In 1872 Sippell established a precedent by hiring them on a yearly basis; they were paid $300, the same salary as the regular lockmasters on the Chambly Canal: "I consider them, taking all things into consideration, the best paid Laborers on this division of the Canals, only those on the Lachine Canal, who are allowed house rent, being as well paid."[100]

By 1877, moreover, these lock labourers were receiving $1.25 a day and a housing allowance of five dollars a month;[101] their counterparts on the Chambly Canal did not reach this level until 1882. In 1892 the staff at the lock comprised, in addition to the superintendent, two lockmasters and two lock labourers, all paid at the same rate of $38 a month. The two lockmasters, employed by the year, were still receiving an annual rental allowance of $60.[102]

Except for the particular mechanical operations they performed, the bridge keepers' and lockmasters' working and living conditions, which were those of permanent employees, were the same. Similarly, the lock and bridge labourers shared the working and living conditions of casual workers.

A bridge keeper's salary in 1867 was $280, as opposed to $300 for a lockmaster. In April 1873 the salaries of the two groups were increased to the same level of $365 a year.[103] By 1892, as mentioned earlier, the standard rate of $38 a month applied to all the workers, including the bridge labourers.

At the end of this period every bridge keeper was provided with a house, with an adjoining kitchen, as well as a watch house. The lockmasters had been enjoying this perquisite for some time. There were always fewer bridge labourers than lock labourers on the Chambly Canal; it was felt that the duties of bridge keeper could be performed without assistance except at certain times, such as when the canal was operating 24 hours a day or when traffic was exceptionally heavy. During periods of recession, the bridge labourers were usually the first to be laid off.

Some bridges, because of their location, involved more continuous work and supervision than others, and assistance was more freely provided at these sites:

> When there is much navigation, it is no doubt necessary that the keepers of a few of the Bridges, such as those on the Main Highway at Chambly and Ste. Thérèse Mills, and on the side road from Chambly Canton to the Railway Station should have the assistance they require.[104]

The choice of a man to fill a position as bridge keeper was often dictated by geographical considerations. This had been the case when the operator of the Ile Sainte-Thérèse ferry was hired, but it was more frequent among the bridge keepers. For example, a father took over from his son in 1887 at bridge No. 1 on the Chambly Canal:

> Mr. J.C. Daigneault has ceased to act as bridge keeper; he has been replaced temporarily by his father, Mr. Cyrille Daigneault. The latter is highly recommended by Mr. Benoit the Superintendent.
>
> He is 44 years of age, a strong and active man, well qualified to fill the position; in fact he is the only one who could attend to this bridge as he lives in close proximity to it; otherwise it would be necessary to purchase a piece of land and build a house for another man.[105]

It was for just such reasons that the government in 1863 agreed to hire Charlotte Dubuc as the replacement for her deceased husband at bridge No. 7, a position she held for 20 years until her retirement in 1883.[106] She was not the only woman to be employed in this capacity on the Chambly Canal; in the summer of 1873, on the death of a bridge keeper by the name of Edson, Mrs. L.H. Carpenter, his daughter-in-law, was placed in charge of the bridge.[107] However, in 1883 the new superintending engineer, E.H. Parent, seems to have been less than enthusiastic

about the employment of women for such duties. No doubt it ran counter to the competence criteria he was endeavouring to establish: "it is an anomaly to have on Canal Works a woman to do a man's duties."[108]

While on the subject of the bridge keepers, one further aspect of their employment should be discussed. The bridge keepers, like the lockmasters, were required to report to the canal workshops at Chambly for work every day during the winter months; however, many of them lived at some distance from Chambly and as they apparently had no horses, their transportation problems can well be imagined. In 1885 six of the Chambly Canal bridge keepers submitted a petition to the superintendent that they be driven to work, on the grounds that they lived six, five, four, three and a half, three, and two miles, respectively, from the workshops. This request was not granted; instead, the petitioners were allowed varying amounts of time to get to the workshops on foot, depending on the distance involved.[109] Ten years later, in 1895, this solution was ruled out by a new superintending engineer, Ernest Marceau. Not only were the bridge keepers, even the farthest away, expected to be on duty in the workshops during the winter, but they all had to be there at the same time: "we are paying for a full day and it is only fair to require at least nine hours' work. Be good enough, therefore, to inform them that they must be at the workshops by 7:30 a.m." [Translation.][110]

Some of the standards or directives in effect during this period are worthy of mention since they throw additional light on the living and working conditions of the rank-and-file employees on the canal.

- Beginning in 1887, permanent employees were permitted to use canal oil to light their houses; only one lamp, however, could be filled from this source.[111]
- Any employee who did not pay his lawful debts and had his possessions seized would be dismissed because "such seizures are a source of embarrassment and create a poor reputation for civil servants, whose salaries cannot be seized" [translation].[112]
- Before 1889, a permanent employee who was ill provided a replacement acceptable to the superintendent, and this replacement was paid from the repairs fund while the permanent employee's salary was "credited to Staff." In 1889 this "completely irregular practice" was forbidden: "any permanent employee who is ill must so inform the superintendent, who will arrange for a qualified replacement during his illness, and the permanent employee will be obliged to pay the said replacement for the entire time he is so replaced" [translation]. However, any employee who was absent from work as a result of injury or illness contracted while on duty on the canal would be compensated by the department.[113]
- An employee who worked on Sunday was paid double time; this had become standard practice by 1886. "Religious feast days during the week, or other so-called legal holidays, will be considered ordinary days and will not entail double time" [translation].
- The practice of paying a permanent or casual employee double time for night work originated prior to 1886.[114]

Ancillary Occupations

The work of the superintendent, the lockmasters, the bridge keepers and their assistants was complemented by a variety of auxiliary services provided by workers who, in their respective roles, helped speed the flow of commercial shipping; however, two of these services had nothing to do with the Department of Railways and Canals.

First, there was the collector of navigation tolls, who was an employee of the Department of Inland Revenue. There were two collectors on the Chambly Canal and one at Saint-Ours. At Saint-Jean and particularly at Saint-Ours, the duties of lockmaster and of collector were sometimes assigned to one man, but in the early 1870s Sippell took steps to separate the functions.[115] However, after discussion with the Department of Inland Revenue, Sippell agreed that the lockmaster at Saint-Jean should also assume the duties of assistant collector; his salary for discharging this dual responsibility was $600 a year. The chief collector was paid $850 a year by the Department of Revenue.[116]

Facilities were provided for the three collectors on the Richelieu in 1884:

> At Chambly, the Collector and Superintendent each occupy one half of a building erected as a canal office by this Department. In May 1882, an office was fitted up for the Collector at St. Johns in a building purchased by this Department from Mr. Pierce, who had erected it on Government ground leased to him. The remainder of the

14 Chambly Canal office beside wharf at Saint-Jean, 1914. (Public Archives Canada, PA-85727.)

> building is used as a store house for canal tools and plant by the Superintendent. This Collector formerly had an office in a Government building which was destroyed during the great fire. At St. Ours, the Collector has a temporary office during season of navigation in the Lock house.[117]

The role of the harbour master was to supervise and maintain order on the wharves at Saint-Jean and ensure that they did not become cluttered with cargo; he was authorized to levy fines on users who failed to observe the port regulations and to collect wharfage fees from merchants or ship operators who took up space on the wharf with their goods.

In 1870 Sippell instructed the superintendent of the Chambly Canal to perform these duties in conjunction with his frequent visits to Saint-Jean.[118] The superintending engineer considered the activities unnecessary, but the residents of Saint-Jean, particularly the merchants, wanted someone on hand to maintain order.[119] It soon became clear that the superintendent had no time to devote to these supervisory duties, and the hiring of a new employee had to be considered. Again it was Sippell who decided what the role and responsibilities of this constable should be:

> The Collector of Tolls should be the person to make the Collections; the Harbour Master acting as his assistant could take the names of all vessels, give them berths at the wharf and report them to the Collector of Tolls; he could also maintain order and see that all freights are removed within, say, 48 hours after landing or otherwise pay a small daily tax as wharfage rent.[120]

The government, however, adopted a different arrangement. The collector would collect the tolls and the harbour master would be responsible for collecting the wharfage fees in addition to exercising the supervision and control already mentioned.[121] Three federal departments were thus represented side by side on the dock at Saint-Jean — Railways and Canals, Inland Revenue, and Marine and Fisheries, a government decision having attached the harbour master to that department. During the 1880s, superintending engineer Parent campaigned in vain to have the harbour master at Saint-Jean (and the revenue he collected) placed under the authority of the superintendent of the Chambly Canal and thus attached to the Department of Railways and Canals.[122] In 1882 the harbour master was receiving an annual salary of $400, while the wharfage fees he collected in that year amounted to $884; there was thus a balance of $484 flowing into the coffers of the Receiver General.[123]

Vessels were towed through the Chambly Canal for the most part by teamsters. During the preceding period, these men had a relatively free hand and there were few regulations to hamper their activities. Towing agreements were made between the teamsters and the owners (or masters) of the vessels, with virtually no involvement on the part of the canal administration.

15 Shelter for tow horses at the northern entrance to the Chambly Canal (Chambly Basin), 1911.

In 1878 the superintendent of the Chambly Canal lodged a complaint against several teamsters whose unruly behaviour was a repeated cause of disturbances. He pointed out that the canal regulations provided no remedy against these abuses; horses were galloping over roads and bridges and trampling private property, while the owners protested and threatened even the canal employees.

The canal office in Montreal accordingly issued the following regulations:

1. Every hauler must obtain an annual licence for each horse he intends to use for towing purposes; the fee for this licence will be four dollars.
2. Any hauler who fails to comply with the orders of the superintendent or his replacement will have his licences revoked.
3. Until these licences are available, anyone who refuses to comply with the instructions of the superintendent will be denied permission to tow vessels along the canal.[124]

In addition, Olivier Deschamps was hired (at a dollar a day) to oversee towing on the canal.[125]

Once again, the matter snowballed and, almost inevitably, became a political issue. The newspaper *La Patrie*, organ of the federal Liberal party, joined the fray:

> Teamsters on the Chambly Canal have been forced to pay a licence of $4 for each horse they use for towing ships. It would appear, however,

> that this licence was paid only by Liberal teamsters and that Conservatives were accorded the privilege of working and reaping the price for their labours without a licence. This is the Tory notion of justice. They tax their political opponents and forget to collect from their friends. [Translation.][126]

In the sound and fury the licences were abandoned and before long the teamsters resumed their disorderly behaviour, harassment and even violence. Superintending Engineer Parent again urged the government to intervene by establishing and enforcing strict regulations: one hauler per team of horses, no driver under 15 years of age, absolute compliance with the regulations and the orders of the superintendent on pain of stoppage of the towed vessel, no abusive or foul language. It was Parent's understanding, moreover, that "the teamsters engaged in towing being employees of the vessels or barges, the master or owners should, by right, be held responsible for any infraction to these regulations." A $40 fine was proposed for the shipowners or masters.[127]

It would appear that nothing came of Parent's suggestions. The following year, teamsters were assaulting canal employees and the situation was even further out of control. Parent could only appeal again for stringent regulations: "there is no clause in the canal regulations now in force restricting the unlimited liberty of action now enjoyed by the teamsters on the canal and the Superintendent is powerless to check their scandalous conduct or foul language."[128] His urging was to no avail, at least during this period. In the circumstances, Parent's acquiescence to a request from the teamsters that same year (1888) to have shelters built for their horses at each end of the canal is difficult to explain. The men were not even canal employees.[129]

Meanwhile, the possibility of introducing towing with horses at Saint-Ours was being considered. The idea was suggested by Superintendent Larue in 1878,[130] then supported by the ship operators,[131] and finally accepted by the department in the spring of 1880.[132] Because of the lack of space to manoeuvre, the vessels were towed through the lock by means of two pulleys, one at each end of the lock, as was done at the Sainte-Anne lock.[133] At first Superintending Engineer Parent had intended allowing the shipowners to employ anyone they wished to tow their vessels;[134] however, this plan was speedily abandoned, perhaps as a result of the disturbances on the Chambly Canal. Early in the 1880s, towing at the lock came to be regarded as a privilege which was accorded to a man who owned horses and was of sober character, qualified and "well recommended" by the local MP, J.B. Labelle.[135]

The existence of the Chambly Canal workshops made it possible to have repairs and even construction done without relying on the slow, costly and inexperienced services of outside workers. The workshops were manned during the winter by the increasingly skilled and specialized permanent employees of the canal.

At the end of the 1860s the building housing the workshop was located to the east of lock No. 8 (combined locks) and was used for nearly all routine work. In 1883 a new workshop was built between locks 6 and 7 on the east side of the canal, mainly to provide accommodation

16 Chambly Canal carpentry shop and sawmill, 1904. (Public Archives Canada, PA-85606.)

for carpentry activities. The old workshop was used for a time to store cement, but was finally demolished and rebuilt in 1886 near the new carpentry workshop, again to serve as storage accommodation.[136] In 1888 an engine room 28 feet by 20 was built on to the carpentry shop, and two years later a 26-foot extension was added to house some very modern woodworking equipment, including a large planing machine. At this time the workshop measured 160 feet by 30, exclusive of the engine room.[137] How comfortable was this large building in the winter?

> That portion of the workshop where the carpenters are working is heated by means of iron pipes supplied with steam from the engine room and act as exhaust for the boiler. When the engine is not running, then the steam is supplied direct to the heating apparatus by a separate pipe, thus giving an uniform temperature and doing away with wood or coal stoves, which are a great source of danger.[138]

As soon as the engine room was built in 1888, a maintenance mechanic was hired to keep the engine and the equipment in the workshop in good running order; he began as a seasonal employee but was soon kept busy the year round, earning a salary of $75 a month.[139] The extra carpenters required from time to time on the Chambly Canal were paid $1.75 a day in 1886.[140]

17 Chambly Canal blacksmith shop, 1904. (Public Archives Canada, PA-85607.)

The canal workshops were enlarged in 1888 to include a blacksmith shop. This addition filled a long-felt need since the work done on the canal almost always required the services of a blacksmith; during the fiscal year 1886-87, for example, a total of $2366 had been paid to Chambly area blacksmiths for various work.[141] The blacksmith shop was first set up in the old workshop which had been converted to storage purposes, a frame building 45 feet by 20, located near the carpentry shop. On 18 January 1890 this structure was destroyed by fire; reconstruction was begun immediately and was completed by March 1. The new workshop, measuring 40 feet by 26, boasted a cement floor and a metal roof; it was equipped with more modern machinery, and power was supplied from the carpentry shop by means of a transmission cable.[142] However, the proposed construction of a sawmill was postponed. Until the end of this period, there was no full-time blacksmith at the Chambly Canal; Charles Trudeau, a lockman at the No. 3 lock and a blacksmith by trade, operated the forge as required.[143]

It was at this time that electricity came into use, and it was quickly decided that the Richelieu canals should have the benefit of this great technical innovation. A power plant was erected a mile and a half from the workshops early in the 1890s; shortly afterward, a 25-horsepower electric motor was installed in the workshops:

> The electrical system on the Chambly Canal is now complete. Inside and outside lighting at Chambly and St. Jean is very satisfactory. The workshops are lighted and the machines operated by electricity. The annual expenditure is only $1765.00 for Chambly and $300 for lighting the lock, the harbour and the offices at St. Jean – a total of $2065.00. [Translation.][144]

An electrician was hired in July 1891, on a year-round basis, at a salary of $60 a month. He was provided with quarters on the second floor of the power plant, a building measuring 31 feet by 26.[145] An electrician's helper was taken on the following year "because one man cannot be expected to be in attendance almost 24 hours per day." His salary was $45 a month throughout the year.[146]

Various other workers were employed on the Chambly Canal at this time, mainly to provide caretaker and maintenance services:

1. In 1886-87 the telephone reached the canal and Thomas Benoit was hired as caretaker and operator of the canal line; because the service was operated from the superintendent's office at Chambly, Benoit was also assigned duties as clerical assistant to the superintendent. His initial salary of $45 a month was increased to $60 in August 1890.[147]
2. The carbon man was responsible for the maintenance of the 27 electric lights extending over a distance of a mile and three-quarters from the wharf at Chambly Basin to the power plant near lock No. 2. He also looked after the lighting system in the workshops, offices and workers' shelters. Joseph Daigneault was hired in 1892 at a salary of $40 a month.[148] Prior to 1891 the entrances to the Chambly Canal were lit by means of street lamps, necessitating the employment of lamplighters – two at Chambly (one at Chambly Canton and the other at Chambly Basin) and one at Saint-Jean. In 1875 the lockmasters were responsible for the maintenance of the lamps, but in 1880, men were hired especially for this purpose; in 1891 Jacques Audet was earning $150 for seven months' employment at Chambly, while Gaspard Trouillette, who had fewer lamps to tend was paid $100.[149]
3. In 1891 there were three watchmen on the canal. Noël Scott had been night watchman at the workshops since 1887; in 1889 he took over the interior maintenance of the canal office as well, at a salary of $30 a month. A second night watchman, E. Deschamps, was taken on at the workshops in 1890, to be on duty from 1:00 a.m. to 7:00 a.m. In addition, he acted as storeman from noon to 7:00 p.m., when he was replaced by Scott. His wages were a dollar a day. There was also Hormidas Martial, who was listed as a watchman although his contribution was negligible; he had been seriously injured while working on the reconstruction of the guard lock at Saint-Jean in 1886 and it had been arranged that the government, by way of compensation, would keep him on in this somewhat ill-defined capacity at a salary of $38 a month.[150] These three men were employed the year round.

18 Overall view of workshops and sheds on Ile d'Avard, at the Saint-Ours lock, 1930.

There could be no question of such a proliferation of duties and staff at Saint-Ours; however, various facilities were constructed: a tollhouse, which also served as a night shelter for the lockmen (1873),[151] a shed (1879),[152] a warehouse (1885),[153] a storage shed for lock gates (1886),[154] and a repair shop 50 feet by 25 (1890).[155] A small forge was also set up on the island, which in 1894 was operated by lockman Félix Duval.[156] Superintendent Coderre thus had only four employees under his supervision: Félix Duval and Charles Lemay, lock labourers but employed on a year-round basis, and William Pouliot and Joseph Comeau, also lock labourers, employed during the seven months of navigation. It seemed clear that Saint-Ours would never be more than the tenth lock of the Chambly Canal.

While the years from 1852 to 1867 had been devoted to planning and structural development, those from 1868 to 1896 were predictably and necessarily a period of expansion, construction and growth which not even an almost continuous economic recession could arrest. The Richelieu canals had begun to function not merely on the basis of theory and experimentation, but with proven and quite consistently controlled methods of operation. The human resources needed to operate a canal effectively were now known, and the working and living conditions of the workers were established, at least in the minds of the government managers.

The workers had submitted quite passively to standardization and categorization during these difficult years, but they had at the same time gained considerable insight into the workings of a government enterprise, including its weak points. They looked around for support, for an intermediary or a means of exerting pressure on their employer, with its now well-established regulations. The local MP was only too willing to take on this role on the usual terms of one favour, one vote. The efficacy of political leverage was well known among the canal

workers and the surrounding population; it was a tool that had proved its worth on many occasions.

The year 1896 marked the beginning of a new era for the country. Prosperity returned, but with it came a new government, new MPs, ideas of change, and a war. The canal employees would feel the impact of these events on their work and indeed on their daily lives. Not all crises are economic.

Chapter V
Political Appointments and Employment Policy: 1896-1920

The 25 years covered in this chapter followed a long period of economic recession and instability, and were followed in turn by a particularly sombre decade at the end of the 1920s. Why does this chapter not include the crash of 1929? The first reason has to do with reference material, the richest vein of which comes to an end in 1920; for reasons still unknown, the letterbooks of the Quebec canals (containing copies of all the correspondence emanating from the office of the superintending engineer) do not go beyond 1920. The chapter beginning with 1920 is based on new sources and consequently has a somewhat different character, which should be marked chronologically.

The 1920 demarcation is also suggested by the events themselves. On the one hand, the reintegration of the servicemen into the labour market, particularly on the canals, brings us to 1920, at least in terms of regulations. On the other hand, it was only in 1921 that the wartime budgetary and administrative restrictions affecting the canals were lifted, resulting in a resumption of hiring and operational activity.

Although suspended between two quite distinct recessionary periods, the years from 1896 to 1920 were not themselves unmarked by change. For the canal workers, this quarter-century unfolded in three successive phases: the aftermath of the recession (1896-1903), recovery and expansion (1904-14), and war measures (1915-20). Before attempting an analysis of the period from documentary sources, it may not be amiss to offer a brief explanation of the phenomenon of political patronage or "protection," which had a profound effect on the work environment and on the very lives of civil servants.

Patronage and Public Servants

The primary meaning of the word patronage is "support or encouragement" given by a person of influence.[1] In this sense it is a practice as old as the hills. The use of patronage in politics has an equally long history; however, it became institutionalized with the development of responsible government. In the context of Canadian political tradition, it is both a British and an American heritage:

> The early British tradition of placing friends in office, which was introduced by the colonial governors, was loyally carried out, and it was even improved upon by adding to it the contemporary American idea that "to the victor belong the spoils of the enemy". The influence of the latter theory upon the Canadian service has been ... strong and persistent.[2]

The political concept that the victor has the right to dispose of the spoils of his conquest as he sees fit was introduced into American federal politics in 1829 by President Andrew Jackson. According to his theory,

> a place in the public service is held at the absolute pleasure of the appointing authority; ... it is invariably bestowed from party motives on a party man, as a reward for party services; ... no man expects to hold it any longer than his party holds power; ... this gives him the strongest personal reasons for fighting in the party ranks.[3]

Jackson was particularly disposed to apply such principles since he had come to believe that a long tenure was detrimental to good public service and only rotation in office could prevent the abuse of power by the holder of that office. This idea was based on two assumptions: that an office in the public service required no special ability, and that no individual had a greater right to an office than anyone else:

> the public owned the Government, and it therefore had a right to pass the offices around. Efficiency might necessitate permanence, but equality could not tolerate it, and no one must be allowed to forget that all men were created equal.[4]

Canadian political parties were strongly influenced in their attitude to public office by English and American experience and tradition. Variations of the spoils system were soon adopted by the politicians, particularly after Confederation. The party in power came to expect, for example, that it would have the support of civil servants against the opposition.

In such circumstances, the accession of the opposition to power became the signal for numerous dismissals on grounds of political partisanship. Such was the case in 1873 following the resignation of John A. Macdonald, and again in 1878 when the Liberals were defeated. As is pointed out by R.M. Dawson, the Canadian public service historian, "the custom of pre-Confederation days, that political partisanship would justify removal, was carried out with efficient thoroughness."[5] The new government could, moreover, accuse the "untouchables" of incompetence, which it did not hesitate to do. For the dictum of every new MP or minister had become "We must support our supporters."

It is true that a civil service act had been passed by Parliament in 1868, which provided, among other things, that every candidate for employment in the civil service should pass an admission examination; however, in most cases these controls were not exercised or taken into account. Nor were the acts passed in 1882 and 1885 any more rigorously applied. All these measures, moreover, including the 1908 act, failed to take into account the employees in the Outside Service – those working outside the capital and the higher departmental circles. The civil service act of 1918 was the first to encompass all employees of the federal government; this measure was necessitated by the influx into the labour market of returning ex-servicemen at the end of the 1914-18 war. It may be said, therefore, that until 1918 at least, patronage retained a strong hold in the Inside Service and was rampant in the vast reaches of

the Outside Service. R.M. Dawson discussed the subject of the Outside Service:

> Patronage was particularly shameless in the Outside Service: ... "politics enter into every appointment, and politicians on the spot interest themselves not only in the appointments but in subsequent promotions of officers. While at Ottawa the departments generally are administered with a good consideration for the public interest, yet in the outside service the politics of the party is of greater importance in making appointments and promotions than the public interests of the Dominion. Practically in no case is it possible to fill a vacancy in one locality by a transfer from another. Each locality is separately guarded.... In the outside service, those who have the 'political pull' use it for all it is worth."[6]

The establishment of a Civil Service Commission under the 1908 act immediately aroused the enthusiasm and optimism of all who had objected to the unconditional authority of such a system; however, the Liberal defeat in 1911 must have dampened their spirits considerably for no sooner had the Conservatives assumed office than heads began to roll: "it is generally believed that the Conservatives in 1911 eclipsed the Liberals in 1896 – no mean achievement."[7] Less than four months after this election, it is said, 236 postmen were dismissed from office, and in three years almost 11 000 employees had resigned or been removed.

By 1917 the civil service was in a deplorable state; with patronage reigning supreme in the Outside Service, the situation seemed even worse than in 1890 or 1896. All appointments had become political; there were no qualification standards; promotions and salary increases were granted on the basis of political orthodoxy and services rendered. In 1918, however, a new civil service act was passed, bringing the Outside Service at least under the jurisdiction of the Civil Service Commission and empowering the commission to undertake a classification of this sector. Strict qualification standards and mandatory admission examinations were established:

> The Act virtually eliminated political patronage.... Later events, it is true, proved that party influence in the service was not entirely dead, but it received in this statute a blow from which it has never recovered.[8]

Evidence will show in the next chapter that political patronage survived the 1918 act much better than Dawson has indicated. While the validity of Dawson's overall assessment of political patronage in Canada is not questioned, he does not seem to have provided a sufficient explanation of either the basic dynamics of the phenomenon or, what is more important, the main reason for its success and its social acceptance.

As a society becomes more structured and bureaucratic, it loses touch, in a sense, with people. The imposition of categories, standards and regulations on a population inevitably impels the ordinary individual to seek the help of intermediaries in threading his way through the

labyrinth. After 1867, in particular, the French Canadian turned increasingly to his elected representative to assert his rights, to voice complaints or grievances, or to request favours or recommendations. To secure a job, for example, in a society in which the individual was now frequently an unknown, a "recommendation" was essential.

In another sense, the advent of Confederation enhanced the role of the parties in the national political system. To enlist supporters, organizers and financial backers, the parties relied, at the outset, on patronage. Since the worker and the politician were thus both seeking support, their common goal inevitably brought them together.

There is, however, another aspect of the phenomenon to be considered. Patronage, especially in the 19th century, was seen as a commendable practice. Close personal relationships, mutual help, the protection of the weak by the strong, were basic human and moral values. As has been pointed out, moreover, a personal recommendation from a person of rank or quality was considered a guarantee of reliability and respectability. J.E. Hodgetts, in his historical analysis of the Canadian civil service, has pinpointed this social reality more clearly than Dawson: "the argument against a powerful Civil Service Commission, or other such independent body, was that it could not get to know prospective candidates in the various constituencies as well as M.P.'s could."[9]

Along the Richelieu canals the history of "political protection" goes well back into the preceding period, to the early post-Confederation years. Instances of it have already been mentioned, but it is worthwhile to trace its development. There was, first of all, an initial phase from 1867 to 1878 during which the policy, while not mandatory, was consistently and quietly applied. The intervention of the MP was limited to supporting requests, recommending workers, and so forth. In this respect, he often played a useful role, for the government administrators rarely undertook to correct an error or right an injustice on their own initiative; specific cases had to be brought to their attention and supported before they acknowledged an irregularity and agreed to remedy it. In May 1871, for example, through the good offices of Mr. Benoit, the sitting member, Sippell learned that Edmond Mailhot, bridge keeper at the No. 8 bridge on the Chambly Canal, had been employed for three years and had not yet been made permanent; Sippell hastened to rectify the situation.[10] From time to time also, an MP would bring pressure to bear on a superintendent or on the superintending engineer to have a disciplinary dismissal revoked[11] or to request the rehiring of a casual worker for the new season.[12] It was clearly understood at the time, however, that such representations did not have the force of commands and that while the administrators might take them into account, they did not feel bound by them.

Ordinary MPs might request, but ministers demanded. Hector Langevin, minister of Public Works in the early 1870s, did not hesitate to order Sippell to rehire John Lynch[13] and Joseph Demers,[14] who had been employed as carpenter and foreman respectively on the Chambly Canal. Langevin was known to be very approachable, a characteristic that encouraged workers at even the lowest levels to solicit his protection, usually without going through the local MP.[15]

A turning point came, as Dawson points out, with the return of the Conservatives to power in the federal election of 1878.[16] Along the Richelieu it was not so much the dismissals as the change in tone that reflected the escalation of patronage. A few people found their employment at an end, the most prominent being the superintendent of the Chambly Canal, Louis Ouimet. Following his suspension in May 1879, ostensibly on grounds of poor administration, incompetence and fraud, the political motivation behind the affair soon became clear. The accusations originated, interestingly enough, with the Conservative member for the riding of Chambly, P.B. Benoit, who in 1886 became superintendent of the Chambly Canal.

An article published in *La Patrie* accusing P.B. Benoit of blackening Ouimet's reputation and bringing about his suspension[17] drew a reply from Benoit on 21 May 1879 in *La Minerve*, the Conservative party newspaper in Montreal. While denying that he had resorted to Liberal tactics or sought to rid himself of political opponents, Benoit nevertheless wrote:

> As for you, Mr. Ouimet, after taking part in political meetings in the Rouville, Saint-Jean, d'Iberville and Chambly ridings, what have you to say about the principles of your [Liberal] friends regarding dismissals? If the Conservative Party were to adopt them, I would not have to bother justifying your suspension.

The member continued with specific accusations:

> Three labourers state that in order to obtain work on the canal, they were forced by Louis Ouimet to buy their provisions from one of the Superintendent's political friends. On two occasions, he took it upon himself to withhold the wages of these men and turn them over to his storekeeper friend, without authorization; in 1878, he suspended a bridge keeper for influencing the political opinions of his subordinates; this action by Ouimet had the expected effect of causing several canal employees to vote contrary to their known political convictions.
>
> Four permanent employees state that Ouimet told them that if they voted against Messrs Préfontaine and Willett [the Liberal candidates], they would be liable to lose their jobs.
>
> Several other persons have declared before a magistrate that Ouimet promised them work if they agreed to vote for Mr. Willett and that he threatened them with serious personal consequences if they dared vote against the Liberal Party. [Translation.][18]

After many months, an investigation into the matter was finally launched; the charges against Ouimet were never proved, but faced with

dismissal, he elected in November 1881 to resign in exchange for payment of salary arrears owed to him.[19]

Other equally sensational, if infrequent, incidents clearly showed which way the wind was blowing after the election of 1878. The gloves were off and the vindictive struggle for power became unremitting. Where the canals were concerned, MPs grew more dictatorial and more strident. Was Superintendent Larue about to replace a lock labourer at Saint-Ours? Montreal reminds him that before selecting the new employee, it would be advisable to ask the opinion as well of the MP who controls such appointments.[20] This new *modus operandi* was indicative of the role the elected officials were now playing with respect to the government payroll. E.H. Parent, the superintending engineer, did not take kindly to this type of pressure, which in his view encouraged insubordination and unrest: "exterior influence and political intrigue have always had too much to do in the management of this canal and it is impossible to restore good order before such influencing by outsiders be put a stop to."[21]

One final example illustrates with particular clarity the destructive effects of this excessive use of patronage. In July 1888 Lévi Larue, the elderly superintendent of the Saint-Ours lock, finally retired. To whom did he address his letter of resignation? To his immediate superior, the superintending engineer? To the departmental secretary in Ottawa? No indeed. It was Larue's MP, J.B. Labelle, who took charge of the letter and sent it to Ottawa with the name of the successor he "recommended," Alfred Coderre.[22] As mentioned in the preceding chapter, the Montreal office did not favour the appointment of Coderre because he had no experience on the canals, but the MP would not hear of an employee from the Lachine Canal being parachuted into Saint-Ours. The elected official won the day.

The return of the Liberals to office in 1896 was the signal for a new purge of political undesirables. Dawson indicated the extent of the sweep:

> Immediately, a large number of civil servants were dismissed from office. In eight departments between 13 July 1896 and 9 April 1897, 473 employees were dismissed, removed or superannuated, and, of these, 196 were stated to be for "offensive political partisanship". This number increased greatly during the next few years.[23]

Dawson continued to say that the Outside Service suffered particularly in this debacle because nominations to that sector were more political and the rewards for party activity more tempting.[24]

Accusations of political partisanship were brought by the Liberal government against 14 Chambly Canal employees: five lockmasters, seven bridge keepers, a toll collector and a maintenance mechanic (all permanent employees) were charged for the most part with having visited the Conservative committee room on Saint-Pierre Street in Chambly. There were also accusations of electioneering (on behalf of the Conservatives), attempts to intimidate and influence voters, speeches disrespectful to Laurier and Willett, and even the production of

a political cartoon ridiculing the Liberals. The employees were suspended. Ottawa appointed a commissioner to conduct a country-wide inquiry to identify the offenders: on 24 March 1899, G.A. Mothersill submitted his report, which exonerated the 14 Chambly Canal employees.[25] In 1903 nine of the 14 were still occupying their positions; the other five, for reasons that are not known, had given up their employment.[26]

It was much more difficult to displace permanent employees than casual workers; the latter were simply not rehired the next year, no explanation or justification being required. Be that as it may, the Liberal "crusade" assumed such proportions that the Commons called for a further inquiry. This time a detailed statement was called for of all staff changes that had occurred in the civil service since the 1896 election. The information with respect to the Quebec canals was made available on 15 January 1898.[27]

In all, 171 employees of the Quebec canals left their employment between the election in 1896 and January 1898, including 29 at the Chambly Canal and one at the Saint-Ours lock. There were, of course, various reasons for these departures. On the Richelieu, for example, the 30 staff changes were explained by Superintending Engineer Marceau as follows:

> Death: 3
> Active political partisanship: 1
> Considered undesirable by the department: 2
> Positions abolished: 9
> Seasonal workers laid off at end of navigation and replaced at beginning of new season: 15

Nearly half the terminations appeared to have been for arbitrary, probably political, reasons.

The inquisitorial climate that prevailed at this time is quite evident in the correspondence of the canal office at Montreal. It would not be an exaggeration to describe it as a "believe or die" atmosphere, in which no one was above suspicion. Ernest Marceau himself, the superintending engineer, was required to co-operate in the purge and to demonstrate a zealous approach to the task. In January 1897 he had considerable difficulty explaining to Mr. Madore, whose riding took in a section of the Lachine Canal, why there had been so few staff changes at that canal: "your letter seems to me rather uncalled for. I feel I have done all I can since June 23 last to show my willingness to favour the Government's friends." [Translation.][28] In addition, before hiring temporary workers for a new navigation season, the superintending engineer now had to obtain from each MP whose riding adjoined a canal, a list of "recommended" workmen; this instruction emanated directly from the minister of Railways and Canals, whose approval of the recommendations was obviously required to make the appointments official.[29]

Marceau had to be particularly careful to avoid any involvement in this new procedure:

> I never in any case notified any of the former employees that they would be taken on upon the works. Some of them inquired whether they

> would be re-engaged, but I referred them to the Member of Parliament for the riding, telling them at the same time that, in the matter of appointments, the Member's recommendation and the Minister's approval were necessary before anything could be done.[30]

Signs of the times! In the superintending engineer's letters of this period are such statements as: "on the Chambly Canal list [of seasonal employees], I have only entered the names of the men whom the Hon. C.A. Geoffrion has signified his intention to retain in the service."[31]

A hiring policy of this kind was bound to lead rapidly to irregular and indeed untenable situations. Competence became a secondary criterion in the selection of workers, as did integrity and loyalty, the two qualities which Sippell had earlier considered essential to a sound canal organization. Marceau himself was very much aware of the extent to which incompetence was now hampering operations:

> Now that the operating staffs on the canals under my charge have been appointed, I feel compelled, in justice to myself, to state that their composition, at least at certain points, gives me a good deal of anxiety.
>
> While I do not doubt the men's willingness to discharge their duties to the best of their ability, the fact remains that their lack of experience in the working of locks, etc., may and will probably result in the occurrence of delays to the traffic and possibly of accidents of a more or less serious nature.[32]

Insubordination on the part of politically appointed employees was also a threat, particularly to a superintendent like P.B. Benoit, the former MP, who had every reason to softpedal his old Conservative loyalties and his exploits in the political arena. As an example, Ferdinand Robert, who had been assigned to work on repairs at Chambly, was ordered by Benoit to report to the foreman at Saint-Jean; he refused, claiming that a Mr. Allard, "one of the political chiefs of the county," had told him to stay at Chambly.[33]

Much could be written about patronage, the ways in which it was exercised, and its consequences, for it is a well-documented phenomenon. The subject will not be dealt with exhaustively here, but the extent to which it affected the lives and working environment of the canal employees will be illustrated. It would serve no purpose to recount the events surrounding the Conseratives' return to power in 1911, which were similar in nature and extent to the aftereffects of the election of 1896, but the superintendents' experiences were typical of the period.

At Saint-Ours Alfred Coderre, with the backing of the Conservative member, Labelle, had succeeded Lévi Larue in 1888. Ten years later, in 1898, he was dismissed from his post by the Liberals "for political partizanrie,"[34] and Olivier Laventure was chosen to succeed him. Laventure lost no time in hiring his brother as diver, hauler and works foreman.[35] With the return of the Conservatives to power in the

1911 election, Laventure was in turn displaced and Coderre reinstated as superintendent.

At the Chambly Canal, the Laurier government was trying to rid itself of Superintendent P.B. Benoit, the former Conservative MP who had been the cause of Superintendent Ouimet's downfall in 1879. Whether because of his popularity or his connections, Benoit proved difficult to dislodge. As a compromise, a transfer to new fields was decided upon. A position of "controller of stores for the Quebec canals" was created for Benoit in Montreal, where he would be responsible for checking the books and inventory records of the various stores, at a salary of $1.50 a day.[36] To replace him as superintendent, the Liberals appointed one of their own, P.A. Jodoin. In 1912 the Conservatives launched a cleanup; J.E. Robitaille took over at Chambly and, as fate would have it, Jodoin was sent to replace the deceased P.B. Benoit in the "crucial" position of stores controller in Montreal.[37]

Politics had become a very important factor in the operation of the canals, and its influence continued into the 1920s. The economic situation, nevertheless, continued to dominate the Richelieu waterway and the lives of the employees.

Aftermath of the Recession and Recovery

In 1896, according to the history books, economic growth resumed in the western world. Industrial activity increased and prices rose. Quebec obviously benefited from the return to prosperity; an increasing inflow of capital, particularly from American sources, accelerated the rate of growth.

The effects of a lengthy recession such as that experienced in Quebec tend to linger and it may take several years for confidence to be restored: people wait for concrete evidence of recovery. The Richelieu canals had been seriously affected by the reduction in Canadian exports of squared timber to the United States early in the 1890s; moreover, the essential repairs to the Chambly Canal begun during the 1880s were not completed until 1898. Only then did the department feel confident that the canal was in a good state of repair.[38]

Shipping statistics for the Chambly Canal indicate that around the turn of the century, the volume of goods carried was about 350 000 tons. What gave the Richelieu waterway fresh impetus was the discovery of a new market in the United States for pulpwood. The growth of American newspapers created an enormous need for raw material and with the development of the pulp and paper industry, particularly in the St. Maurice valley, Quebec was in a position to meet this demand.[39] It was in 1904 that pulpwood began to be shipped southward in quantity, as the official canal statistics indicate:[40]

Year	Volume of Shipping (Tons)
1895	359 027
1897	352 136
1899	362 635
1901	359 798
1903	346 571
1904	448 187
1906	498 939
1909	752 117

Meanwhile, the number of workers employed on the Chambly Canal was declining. Whereas in 1892, 53 names appeared on the official staff list (21 permanent and 32 temporary employees),[41] by 1903 the total had dropped to 43.[42] These employees constituted the operating staff and did not include casual workers assigned to repair or construction activities. The local people did not understand the economic situation and protested the reductions in the work force;[43] however, the department pursued its restrictive policy with greater vigour in response to a Liberal investigation in 1899 of the "poor administration" of Superintendent P.B. Benoit and accusations against canal workers of incompetence, lack of discipline and neglect of duty.[44] In 1902 Benoit was forced to reduce staff still further, a move in which Marceau, his superior, reluctantly concurred: "you tell me that you have had to cut staff in order to conserve funds for urgent repairs. Unpleasant as it is to have to dismiss workers, and even foremen, there was no alternative in the circumstances." [Translation.][45]

Then in 1904 came the long-awaited and yet unexpected upturn. The Richelieu canals gained a new lease of life from the increasing traffic in pulpwood. While this commodity had been carried on the river for several years, the volume for the first time became significant.

The newfound prosperity was reflected immediately in a resumption of hiring, beginning with lock labourers in the summer of 1904:

> With the increased traffic in the last two or three years, there is no doubt that the working of the Chambly Canal is not what it should be and I am of opinion that if one man were added at each of the six locks from St. Johns downwards, both the Canal and the navigation would benefit by it.[46]

In August 1904, in response to pressure from the local MPs, Geoffrion and Demers, the department took on not one but two extra men at the six locks in question, at an additional cost of $3000.[47] In the summer of 1906 the entrance lock, No. 9, at Chambly also acquired two assistants.[48] Beginning in 1907, moreover, the department began replacing the old watch houses provided for the bridge keepers and lockmasters; construction and installation of new shelters was completed in 1909.[49] Between 1909 and 1911, the residences assigned to these employees were renovated and enlarged.[50]

While most of the new employees were hired to work on the locks, the list of operational personnel shows other workers as well. This list, which was fairly regularly updated at the time, reflects the employment pattern on the Chambly Canal. The number of employees declined from

53 in 1892 to 43 in 1903, but then rose to 61 in 1905[51] and to 67 in 1910.[52] It remained at this level until wartime restrictions necessitated a radical cut-back. It was perhaps a sign of the renewed vitality that in 1911 it was decided to provide some of the canal staff with uniforms; the designated employees were:

Chambly Canal:	9	lockmasters
	27	lock labourers
	9	bridge keepers
	3	bridge labourers
	1	constable
	1	assistant harbour master
	2	watchmen
Saint-Ours lock:	4	lock labourers[53]

After the years of economic recession and political turmoil, this spectacular increase in business might have been expected to ensure a long period of healthy activity for the canals, but the gods of war decreed otherwise.

War Measures

When war broke out in Europe in 1914, Canada was drawn into the conflict. Economic restrictions were imposed immediately in order to channel as much money as possible into the country's war effort. On the canals, the required economies were made in part at the expense of the work force. Prior to the conflict, the Chambly Canal was operated by 60 employees; by January 1916 the operating staff was down to 31 men. There were even cuts in the repair budget: from a total of 155 workers assigned to various projects in September 1911, the number in January 1916 had dwindled to 29.[54]

The situation was the same on all the canals, as Table 4 indicates.[55]

Table 4
Manpower Employed on the Quebec Canals, 1911 and 1916

	Operations		Repair	
Canal	Sept. 1911	Jan. 1916	Sept. 1911	Jan. 1916
Lachine	140	50	143	97
Soulanges	59	22	311	52
Chambly	65	31	155	29
Saint-Ours	6	1	25	5
Carillon-Grenville	38	8	12	5
Sainte-Anne	5	1	9	7

These quantitative measures were coupled with qualitative guidelines. For example, from 1916 on, it was stipulated that only men who were not of military age could be employed, the objective of course being to stimulate voluntary enlistment and perhaps pave the way for eventual conscription.[56] A further purge of personnel was contemplated in 1918 and lists were drawn up containing the names of employees whose services on the canals were considered indispensable;[57] however, it would appear that this final bloodletting did not take place.

The workers who were fortunate enough to keep their jobs on the canals benefited from the higher salaries engendered by the buoyant economy. It is one of the paradoxes of war that accelerated industrial, agricultural and business activity goes hand in hand with restrictions of all kinds; however, on the canals, competition and the law of supply and demand worked to the advantage of the workers. Salaries offered in the private sector were considerably higher, and the government soon had to face economic reality:

> The rate of wages in the various districts where the Quebec Canals are located is at present, and will for some years continue to be exceedingly high. It is so especially in Montreal where ordinary labourers are currently paid $2.50 and not infrequently $2.75 or even $3.00 per day. For the last three or four years we could not get laborers at the Soulanges Canal and Ste. Anne's Lock under $2.00 per day. An increase of 10% might be allowed on these 2 canals. As for the canals where laborers now receive $1.75 per day, I would recommend that the pay be raised to $2.00.
>
> In Montreal, machinists, carpenters, blacksmiths employed the year around receive from $3.50 to $4.00, from $3.25 to $3.75 and from $3.50 to $4.25 per day. Handy men, from $2.50 to $2.75. A team is paid at the rate of 60 cents and a carter with one horse at 40 cents per hour.
>
> I think our rates of pay to such employees should be raised, at least to such an extent as not to be too much below them.
>
> The salaries of staff on all canals might be increased from 10 to 12-1/2%. In fact, I am of opinion that this rate of increase should apply to all employees generally.[58]

Did the Richelieu canal workers get this ten or twelve per cent increase? Probably not, since a year later, in 1917, the superintendent of the Chambly Canal was forced to promise his carpenters an immediate increase to prevent their leaving:

> He had to promise them an increase of 25 cents a day, as they were going to accept employment on a large building now being erected close to the canal, where they were offered wages almost twice as high as we pay them. Labourers are

> getting as much as $3.00 and even $3.50 a day as against $2.75 we pay our carpenters.
>
> In fact, it is almost impossible to retain our men, and a number of them have already left us.
>
> I would therefore strongly recommend that the increase of pay of 25 cents per day promised to 6 carpenters and of 50 cents per day to one team be ratified, as otherwise we will be so crippled that it will be impossible to keep the canal in proper repair.[59]

Of course this situation benefited the casual workers more than the temporary employees and the permanent staff since they had less to lose by leaving the canals. At all events, Marceau sounded a new cry of alarm in June 1918, declaring that the superintendents could not recruit workers and were even losing the ones they had; the casuals were now demanding very substantial increases and were not prepared to wait.[60] On 3 September 1918 the threat at least subsided; increases were granted, bringing day labourers from $2.35 to $2.75 a day and handymen from $2.50 to $3.00 a day.[61]

It might be of interest to mention the various measures taken by the government during the war years to encourage agriculture among its employees, particularly the canal workers. Briefly and in chronological order, these were as follows:

- July 1917: as much repair work as possible will be deferred, so that the workers will be available for the haying.[62]
- July 1917: as many as possible of the permanent employees are to be given two weeks' paid leave to take part in the haying.[63]
- March 1918: canal employees will be allowed to cultivate the government lands located in the immediate vicinity of their place of work.[64]
- April 1918: a bridge keeper who wishes to cultivate his land may be replaced at his post by a member of his family.[65]

With the end of the war in sight, the government resolved to bring in a new civil servivce act. The authorities had realized for some time, as wounded servicemen began returning from overseas, that the reintegration of large numbers of men into the labour force would soon become a major problem. There was a need for regulations, standards and planning; the new civil service act would serve as a basis for this operation, particularly since the commission established by the legislation would be empowered to organize the vast sector of the civil service known as the Outside Service, into which many of the demobilized soldiers would be absorbed.

No detailed analysis of all the provisions of the civil service act of 1918 or of the powers and standards of the commission will be attempted; it is their effect on the lives and working conditions of the canal population that is of interest. The commission established hiring regulations, many of which were previously unknown, having to do with age limit, health, education, experience, location of candidates, entrance examinations and the like. These standards varied according to the employment categories now established within the Outside Service. The regulations of the commission were established for the future as well as

the present; special provisions had therefore to be included to deal with the exceptional conditions prevailing in 1918.

The main one was that demobilized servicemen would have preference over other candidates for employment in the civil service. In addition, former civil servants returning from the war would be offered their old positions whenever possible. In preparation for the implementation of this provision, lists of employees serving in the armed forces were drawn up in the spring of 1918; these showed that seven Chambly Canal employees had donned uniform during the war.[66] Moreover, the veterans were to be exempt from the standards relating to age, health, education and even experience.[67] Thus in April 1918 Emile Raymond, a veteran who had lost his left arm, was placed in charge of the bascule bridge over the Chambly Canal at Saint-Jean.[68] Absolute priority for employment was accorded disabled veterans. But what became of the employees who were displaced to make room for them?

> The men who previously held positions, which are being thrown open, might be advised to make application as in the event of non suitable soldiers being available, their chances for re-employment would be good.[69]

By the spring of 1919, operation veteran was in full swing; on the Chambly Canal 19 demobilized soldiers had already been appointed – 11 lockmen and 8 bridge keepers.[70] To oversee and accelerate the project, there was a new superintending engineer in the Montreal office. Colonel A.E. Dubuc, himself a veteran with overseas service, had received precise instructions that the civil service regulations were to be rigorously enforced.[71]

Finally, two additional measures were introduced on the Chambly Canal to provide even more employment for veterans. Older employees were encouraged to take early retirement[72] and it was decided that labourers and temporary workers who owned farms would no longer be hired.[73]

Day-to-day Activities

During the years from 1896 to 1920, there were changes in some occupations on the canals that had not yet become institutionalized; however, the powers and prerogatives of the superintendents remained unaltered, as did the limitations to which they were subject. In the case of the lockmasters and bridge keepers, the only significant changes were in their numbers.

The toll collectors functioned somewhat on the fringe of the canal operations; they were not part of the Department of Railways and Canals, and there is little reference to them in the documentation relating to the Montreal office. In 1903 there were five working on the Richelieu: one collector and an assistant at Chambly, earning $1000 and $500 respectively a year; a second team at Saint-Jean, earning $1100 and $500; and finally the collector at Saint-Ours, who was paid $600 a year.[74]

During this period the government abolished tolls on the canals[75] and the collectors gradually evolved into "statisticians," keeping records of the number of passes issued, lockages, pleasure craft, and so on, and compiling daily reports of canal activity.[76] Finally, in 1920, these employees were transferred to the jurisdiction of the Department of Canals and thus came under the canal superintendent: "the purpose of this change [was] to give the superintendent greater authority over all matters relating to his canal and to provide better control of the hours worked by all employees" [translation].[77]

The haulers were a law unto themselves. United in their resistance to control, they answered only to the shipowners. In defiance of orders to the contrary, for example, they continued to drive their horses three abreast along the narrow towpath,[78] to allow children from nine to 14 years of age to act as teamsters and, in particular, to make use of old, sick and dangerous animals.[79] They would often refuse, for various reasons, to tow a vessel, or demand exorbitant rates for their services immediately before the freeze-up.[80] In an effort to resolve the problem, the Montreal office began to consider other means of moving vessels through the Chambly Canal, such as small steam tugs,[81] automobiles,[82] and even special tractors.[83] These proposals, and plans by some American shipping companies to provide their own horses and mules for towing,[84] did much to change the attitude of the haulers.

It was at this time that the staff of the Chambly Canal was enlarged to include a charwoman. A Mrs. Pépin was hired in June 1913 and by 1918 was being paid $18 a month for looking after the canal office and the power plant.[85]

The staff at Saint-Ours, consisting of the superintendent and his four assistants, were a remarkably stable group. In 1910 Napoléon Auger was taken on as a maintenance man for the electric lights at 75 cents a day for 225 days a year.[86] Before the war a charwoman was also hired, at two dollars a month; her salary was increased to five dollars in

19 Team of lockmen at Saint-Ours, 1903.

1919.[87] A blacksmith shop was built on the island in 1902; it measured 28 feet by 24, had a cement floor, and was well equipped.[88] The lockman and carpenter, Francis Duval, operated the shop, thereby increasing his normal wage of $1.50 a day to $1.75.[89]

The war had thus interrupted a revival of activity o[illegible] ichelieu canals. Many people thought that the momentum wo[illegible] resumed when hostilities ended and the canal administrators, [illegible] obviously shared this view, set about to bring the work force up to its prewar level; however, the business recovery failed to materialize to any significant extent. The economic collapse of 1929 snuffed out any remaining hope. As for employment, the answers lay once again, in large measure, with the politicians.

Chapter VI
Stagnation and Decline: 1920-1950

The Richelieu and its Environment

Most enterprises are subject to a variety of influences in the course of their growth and development. Strong pressures may develop as a result of external forces which may not be immediately recognizable because their efforts are felt in different ways.

By 1922 the Richelieu canals should have been experiencing the forward thrust resulting from the spectacular expansion of the time. Industrial growth, stimulated by substantial capital investment, was particularly marked in the primary and secondary sectors. There had been unemployment in 1919 and 1920, and salaries had not kept pace with the rising cost of living, but such difficulties were inevitable in a period of transition.

The canals needed the newly developed traffic in pulpwood to regain their prewar level of activity. There was every reason for optimism in this regard for the pulp and paper industry in Quebec was in a period of expansion; during the 1920s Canada held 65 per cent of the world market in this sector. And yet shipping on the Richelieu never again reached its 1912 level; the 618 000 tons carried on the Chambly Canal in that year fell to 325 000 in 1920 and to 180 000 in 1921.[1] One of the main reasons appears to have been the diversion to the expanding network of railways of a considerable amount of the wood being exported; however, equally significant was the development of trucking that followed the appearance of the automobile. Economical, versatile and fast, this was the vehicle of the future, providing a direct link between the Quebec factory or mill and the American customer.

The Department of Railways and Canals, however, held to the view that once the postwar adjustment was over, activity on the Richelieu would be greater than ever. Reflecting this optimistic expectation, the operating staff, which had been reduced to a low of 30 employees in 1919, was brought back to its prewar strength of 65 in 1922.[2] But between 1921 and 1929 the average annual tonnage carried on the Chambly Canal (mainly pulpwood) stood at 190 000, a far cry from the totals recorded in the period from 1909 to 1912.

Then, toward the end of 1929, came the stock market crash in New York, followed by a world-wide depression. As Vaugeois and Lacoursière point out, "Canada was very vulnerable to international economic conditions since its prosperity depended on only three commodities: wheat and its by-products, pulp and paper, and non-ferrous metals" [translation].[3] Almost overnight all hope of a continuing upswing in shipping on the Richelieu canals was swept away; the American market, which had been absorbing 80 per cent of Canadian newsprint production, cut its purchases to 30 per cent.[4] The fate of the Chambly Canal and

the Saint-Ours lock was sealed for the duration of the crisis and perhaps longer.

The decline in business at Chambly extended from 1930 to 1933, as shown in Table 5.[5]

Table 5
Decline in Commercial Shipping on the Chambly Canal, 1929-33

Year	Goods Carried (Tons)	Decline
1929	123 077	--
1930	99 998	-18.7%
1931	50 336	-49.7%
1932	29 350	-41.8%
1933	26 912	-8.2%

To all intents and purposes, therefore, the canal had become inoperative by 1933. The symptomatic evidence of this is apparent in the lives of the canal workers during the Depression.

It is generally considered that the Depression lasted until the outbreak of World War II in the fall of 1939 although its duration may have varied in some economic or even geographic sectors. At Chambly the business recovery began in 1934; the improvement was slight in the first two years, but gained strength in 1936:[6]

Year	Tonnage	Increase
1933	26 912	--
1934	33 326	+23.8%
1935	44 219	+32.7%
1936	79 731	+80.3%

From 1939 to 1945 the Richelieu canals were subject to wartime restrictions and priorities which were no more conducive to progress than they had been in 1914. It was, in a way, another period of stagnation. As soon as hostilities ended, regular shipping resumed on the Richelieu and until the early 1960s remained at a level of 100 000 tons; however, chemical fertilizer replaced newsprint as the main commodity carried.[7] Annual traffic of 100 000 tons is very little for a canal. In 1950, for example, the 104 000 tons carried on the Chambly Canal represented 692 ships or barges over a period of 213 days, a normal navigation season at Chambly.[8] This meant that the annual traffic level of 100 000 tons would be reached with the passage of three vessels or barges a day through the locks. It was just short of paralysis and one can well understand how the 27 000 tons recorded in 1933 led to the virtual

closing of the canal. These figures also indicate how little the lockmasters and bridge keepers had to do during these years.

Changing Employment Patterns

The events of this period, which affected the commercial life of the Richelieu canals, had an inevitable impact on work organization at these locations. Although changing external influences can affect the future of an enterprise and that of its workers, the effects of such developments are not always immediately apparent. The employment of a staff of 65 on the Chambly Canal in 1922 was less a reflection of the economic reality of the time than of an excessive optimism, engendered no doubt by the victory in Europe and the memory of the commercial success of the years from 1909 to 1914.

In 1912 and 1913, before the war, the pay list for the staff of the canal office in Montreal included 11 employees, from the superintending engineer to the messenger.[9] In 1916, halfway through the First World War, the list is exactly the same (occupations and salaries) except for the position of paymaster, which had been abolished. These ten employees were either permanent or hired by the year.[10]

Table 6
Pay List of Employees of the Regional Office of the Canals, at Montreal, 1916

Position	Time Worked (Months)	Salary
Engineering superintendent	12	$3600
Secretary-accountant	12	2500
Accounting clerk	12	1700
File and records clerk	12	1500
Clerk-typist	12	840
Typist	12	660
Chief draughtsman	12	1700
Junior draughtsman	12	900
Controller of stores	12	1200
Messenger	12	720

Despite the decline in shipping during the war, the staff remained at the same level. Even more surprisingly, the office expanded immediately after the conflict, when the economic recession had set in and activity on the canals had still not picked up. During the fiscal year 1922-23, the pay list for the office records 13 employees, all hired on a year-round basis.[11]

Table 7
Pay List of Employees of the Regional Office of the Canals, at Montreal, 1922-23

Position	Time Worked (Months)	Salary
Engineering superintendent	12	$4500
Senior assistant engineer	12	3180
Chief clerk(formerly secretary-accountant)	12	2880
Architectural assistant	12	2460
Engineering assistant	12	2310
Assistant engineer (junior)	12	1845
Assistant engineer (junior)	12	1845
Accounting clerk	12	1800
Draughtsman	12	1530
Clerk-stenographer	12	1410
File and records clerk	12	1300
Stenographer	12	1080
Messenger	12	900

The Montreal office had obviously become more than a branch operation; the listing of draughtsmen, architects and engineers indicates the change that had taken place. The fact that nearly half the employees had technical training suggests that Ottawa was giving the regions a good deal more responsibility and discretion with regard to maintenance and even construction.

How did this office operate? The working hours had been revised by the Civil Service Commission in 1918:

> It seems necessary to remind all employees that the office hours are from 9:00 a.m. to 5:00 p.m., with an hour and a half for lunch, every day except Saturday, Sunday and official holidays. Saturday hours are from 9:00 a.m. to 1:00 p.m. This applies to all employees whose duties do not require them to remain after 5:00 p.m.

Absences had to be accounted for:

> In future, any employee who is absent without permission for half a day or more must on his return, and without being requested to do so, submit to the secretary, Mr. Lesage, a note giving the reason for his absence. If the reason is illness, he should be prepared to provide a medical certificate on request. [Translation.][12]

These regulations continued to govern the civil service, at least to the end of this period, and since they applied across all departments, the

transfer of the canals to the Department of Transport in 1936 did not alter them.

On the Richelieu canals (or rather on the Chambly Canal), there was a similar increase in hiring. Immediately after the war, in 1919, the operating staff of the canal comprised 30 employees. In spite of the recession that followed, this number had risen to 65 by 1922. The decision to hire additional employees appears to have been based upon the hope, or indeed the certainty, of an imminent business recovery. However, it is difficult to understand why the staff was maintained at this level until the onset of the Depression and even beyond. Two main reasons come to mind. First, while the dramatic growth of the economy from 1922 to 1929 did not bring the desired increase in shipping on the Richelieu, it did generate a climate of confidence and prosperity. In such circumstances governments were loath to cut staff, even where employees appeared redundant or unproductive. Thus the Chambly Canal pay list for 1922 remained intact.

Another important factor was the influence of members of Parliament. At a time when patronage was a way of life, the local MP had a vital role to play. It was essential to his interests that there be no decline in the level of employment, at least in his riding. The pressure exerted on the government by MPs (especially those in power) had a considerable effect on decision making.

Table 8 lists the employees assigned to the operation of the Chambly Canal in 1922.[13] The variations in rates for some employees were due to their classification within the occupational category, based upon the standards established by the Civil Service Commission in 1918.

In addition to the operational staff, 40 workmen were employed on a permanent or semi-permanent basis in various maintenance activities on the Chambly Canal in 1922. These are listed in Table 9.[14]

Table 8
Numbers, Occupations and Salaries of Operational Employees on the Chambly Canal, 1922

No.	Occupation	Time Worked (Months)	Monthly Rate	Salary
1	Statistician (junior) (Chambly)	12	$70.00-75.00	$ 885.00
1	Statistician (Saint-Jean)	12	110.00	1320.00
1	Statistician (junior) (Saint-Jean)	12	75.00	900.00
1	Janitor (statistics office Saint-Jean)	12	10.00	120.00
1	Superintendent (level 3)	12	180.00	2160.00
1	Office clerk	12	95.00	1140.00
1	Stores clerk	12	95.00	1140.00
1	Charwoman	12	18.00	216.00
1	Foreman electrician	12	125.00	1500.00
1	Maintenance electrician	12	105.00	1260.00
2	Operating electricians in generating station	12	90.00	1080.00
1	Charwoman in generating station	12	18.00	216.00
9	Lockmasters	12	70.00-75.00	875.00
25	Lock labourers	8	60.00-67.50	515.00
1	Bridge master (Saint-Jean)	12	75.00	900.00
11	Bridge keepers	7 x 12	60.00-67.50	783.00
		2 x 8	67.50	540.00
		1 x 12	27.50	330.00
		1 x 244 days	1.50	366.00
3	Bridge labourers	8	60.00-67.50	515.00
1	Operator, power-driven bridge	8	72.50	580.00
1	Lighting maintenance man	12	80.00	960.00
1	Patrolman	12	62.50-65.00	772.50

Table 9
Numbers, Occupations and Earnings of Maintenance Employees on the Chambly Canal, 1922

No.	Occupation	Time Worked (Hours)	Hourly Rate	Earnings
1	Carpentry foreman	3000	$ 0.60	$ 1800
1	Carpentry foreman (asst)	3000	0.52-1/2	1575
4	Carpenters (1st class)	2500	0.50	1250
3	Carpenters (2nd class)	3000	0.45	1350
4	Carpenters' helpers	3000	0.40	1200
1	Foreman mechanic	3000	0.55	1650
1	Mechanic (1st class)	3000	0.50	1500
1	Mechanic (2nd class)	3000	0.45	1350
1	Blacksmith (1st class)	3000	0.52-1/2	1575
1	Blacksmith (2nd class)	3000	0.50	1500
1	Painter	3000	0.50	1500
1	Plumber	3000	0.50	1500
1	Gardener (monthly rate)	12 mos.	90.00-95.00	1125
1	Watchman (monthly rate)	12 mos.	65.00-70.00	825
1	Foreman labourer	3000	0.55	1650
15	Labourers	2500	0.30	750
2	Teamsters (with 2 teams)	3000	0.60	1800

While these tables may seem sterile at first glance, they depict clearly and concisely the employment situation on the Chambly Canal at this time and make it possible to differentiate and compare the various positions and occupations. They also point up the paradox of a canal operating below capacity (to say the least) and yet employing a staff of 105, representing an expenditure by the government of more than $100 000 in salaries.

This figure does not include nearly $5500 paid for work on Sundays. The Civil Service Commission had ruled that canal employees who worked on Sunday would be paid 25 cents an hour. On the Chambly Canal, it had been decided that the Sunday staff would include the superintendent, 3 statistical clerks, a patrolman, 9 lockmasters, 25 lockmen, 12 bridge keepers, 3 bridge labourers and the operator of the power-driven bridge at Saint-Jean — a total of 55 employees, each working 12 hours.[15] At the Saint-Ours lock the superintendent and his four assistants were also on duty on Sunday.[16]

These five employees constituted the entire operating staff at Saint-Ours in 1922. Only the superintendent was permanent; his four assistants included a lockmaster who received the same rate of pay as his counterparts at Chambly, but did not enjoy their permanent status and was hired only for the eight months of the navigation season.[17]

Table 10
Operating Personnel, Saint-Ours Lock, 1922

No.	Occupation	Time Worked (Months)	Monthly Rate	Salary
1	Superintendent (level 1)	12	$100.00	$1200
1	Lockmaster	8	75.00	600
3	Lock labourers	8	67.50	1620

Employment on the Richelieu canals remained at this level until the end of 1931. The decline in activity along this inland waterway had begun the preceding year in the wake of the crash in the fall of 1929; however, the department had decided not to reduce the operating staff on the Richelieu canals immediately. It may have been a political decision or simply a failure to recognize the seriousness of the economic crisis. Whatever the reason, in 1931 (a year in which the volume of goods carried on the Chambly Canal was below 100 000 tons), there were still five employees at Saint-Ours and 64 between Saint-Jean and Chambly (Table 11).[18]

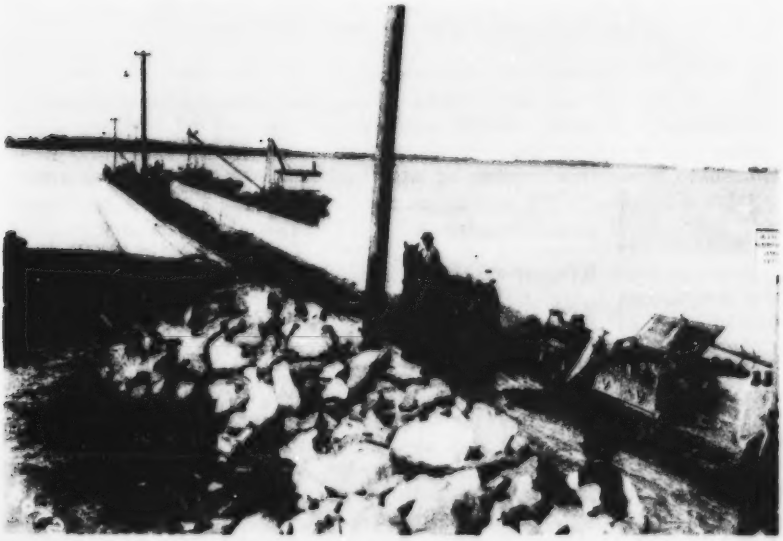
Table 11
Numbers and Occupations of Employees on the Chambly Canal and at the Saint-Ours Lock, 1931

Canal	Employed Year-round (12 Months)		Employed during Navigation (7-1/4 Months)	
Chambly	1	Superintendent	1	Electric light maintenance man
	1	Storeman	1	Telephone repairer
	1	Electrician	27	Lock labourers
	1	Electrician's helper	3	Bridge labourers
	9	Lockmasters	1	Bridge keeper (at lock No. 2)
	8	Bridge keepers	2	Maintenance men - offices and power plant
	1	Bridge keeper (Ile Saint-Thérèse)		
	1	Bridge keeper (Langelier Bridge, Saint-Jean)		
	1	Lamplighter (Saint-Jean harbour)		
	1	Watchman (Saint-Jean harbour)		
	1	Janitor		
	1	Clerk-timekeeper		
Total	29		35	
Saint-Ours	1	Superintendent-lockmaster	4	Lock labourers
Total Both canals	30		39	

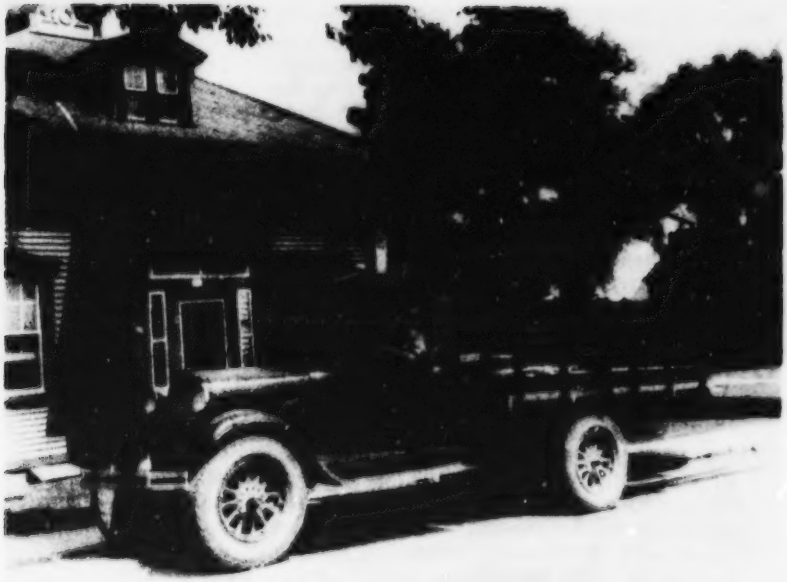
By 1932, cuts had become inevitable, particularly since the business forecasts were even more pessimistic than those of the previous year. No lists are available of canal employees for the Depression years from 1932 to the beginning of World War II; however, ten lockmen and four bridge labourers were laid off at the Chambly Canal (that is, not rehired) before the 1932 season began.[19] Yet these measures did not go far enough. Twenty-six employees were left to man nine locks which had been electrically operated since the 1920s.[20] This meant three workers for almost every lock on a canal that was considered to be closed and inoperative during the darkest years of the Depression.

It is true that other restrictions had been contemplated in 1931. Serious consideration had been given to converting the permanent lockmaster and bridge-keeper positions to seasonal employment and having the water levels at the two entrance locks on the Chambly Canal recorded by two employees hired for the winter at five dollars a month.[21] For reasons that are not known, this measure was never implemented. Beginning in 1933, however, the permanent lockmasters and bridge keepers were reduced to half salary during the off season:

> Partly as a measure of economy and partly due to the fact that there is very little work in the nature of canal operation at their respective stations, these employees were reduced to half pay during the non-navigation season. Ten employees are affected and, for this half-pay allowance, those living near the Village of



20 Teamster assisting in repairs to the wharf at Chambly Basin, 1931. (Public Archives Canada, PA-85844.)



21 Worker at wheel of a Chambly Canal truck in front of the canal office at Chambly, 1933. (Public Archives Canada, PA-85839.)

> Chambly Basin, six in number, are assigned each half-day to maintenance work in the canal shops. The other four who do not live near the shops have certain minor duties to perform at their respective bridge or lock stations, in no case requiring their presence more than half the day. In other words, all of these employees are paid in accordance with the time they are required to work.[22]

By 1936 there were signs of economic recovery. For the first time since 1931, goods carried on the Chambly Canal reached 80 000 tons. It was a very slight improvement, but it was enough to encourage the workers to request that the restrictions of 1932-33 be lifted. There were no unions on the canals, but the Chambly Civil Service Association was formed during the thirties, and it led the campaign for improved working conditions.

In February 1937 the association requested that full salary be restored to the permanent employees during the off season. This was refused:

> As to the question of allowing them full pay during the non-navigation season, there is no

> justification for complying with this request unless they actually work full time. There is not sufficient work of the operation class to keep them employed ful time so that the deficiency in that regard would have to be made up in work of the maintenance class. This would result in a reduction of available winter work for others who have been recommended for employment. The matter therefore resolves itself into the question of whether the regular Operating Staff or casuals are to have the preference in winter maintenance employment.[23]

Despite the undoubted political advantage to be gained from hiring as many workers as possible, the new federal Department of Transport felt that in the long term, it was preferable to provide the permanent staff of the Chambly Canal with year-round employment:

> If the senior positions on the regular Operating Staff were assured of full time employment throughout the year, there is no doubt that the attractiveness of the canal service would be enhanced with a corresponding betterment in the type of men applying for entry into the service. The employees requesting full time throughout the non-navigation season now receive the equivalent of 9-1/2 months at full pay and with an average rate of $90.00 per month earn in a year approximately $850.00. This amount is only slightly greater than an ordinary labourer would earn in a year working 44 hours a week at 35 cents per hour, the established rate in the vicinity.[24]

There would thus be no full salary for half a normal workload, but rather a return to a full year's work. The permanent employees had won their case.

A month later, in March 1937, a request was made for reinstatement of the 14 temporary positions (ten lockmen and four bridge labourers) which had been abolished in 1931. Despite strong support from Vincent Dupuis, the local MP, this effort was unsuccessful. "Although the traffic through this canal has increased during the last two years, I do not think that it will be such this season to require the filling of the positions of the ten lock and four bridge attendants"[25] wrote the superintending engineer of the Quebec canals, Jean Barcelo, in reply to a question from E.B. Jost, his superior, who occupied the newly established position of general superintendent of canals in the Department of Transport.

No lists have been found of the Richelieu canal employees from 1937, when the crisis ended, to the end of World War II in 1945, and research into this period is consequently incomplete. However, on the basis of events of the time and some statistics of business activity, it would appear that the level of employment remained about the same until at least 1945. It does not seem, for example, that the 14 positions

abolished in 1931, the subject of representations in 1937, were reinstated before 1945; the inevitable wartime slowdown on the canals would certainly have precluded their re-establishment after 1939.

Aspects of Daily Life: Some Recollections

One of the more interesting features of this final period, and an important asset to any research, has been the availability of living witnesses to the events of the time. The use of interviews with elderly workers, or others who may have lived through a particular era, involves a certain inherent risk of inaccuracies, generalizations, confusion, errors of interpretation, subjectivity, and so on. The best guarantee of factual accuracy in these circumstances is a comparison of statements, and this safeguard has been used in endeavouring to depict a few particularly interesting aspects of the daily lives of the Chambly Canal workers during these years.

First of all, it was clear from the interviews that the goal of most of the men in the area was to be employed on the canal, in some permanent capacity if possible. This was certainly true during the period with which this study is concerned. Employment with the government usually represented security, and sometimes even a comfortable income, two major considerations for country people. René L'Heureux was superintendent of the canal from 1937 to 1948; in his view, despite the quality of the land and the farms in the area, the men preferred to work on the canal: "the best position a man could get was on the canal; everybody wanted to work there" [translation].[26]

There were other attractions: the prestige attached to the canal and its staff, the "easy" work (the employees were generally considered not to be overworked) and the clothing provided. The permanent employees wore a distinctive uniform with a cap, badge and so forth. The salaries, while not high, were better than those of Chambly residents employed by local manufacturers such as Bennett (leather and shoes) and Cooper (clothing and textiles). The employment opportunities on the canal also explained, according to L'Heureux, the keen interest taken in the fortunes of the two political parties:

> A job on the canal was the best reward a Liberal could get (or a Conservative if the government was Conservative). It was very, very important to work on the canal. That was why the superintendent of the canal was considered almost a prince -- like the parish priest. [Translation.][27]

These statements were frequently confirmed. Armand Auclair, an employee at the Bennett factory in 1933 and mayor of Chambly in 1945, recalled that the presence of the canal at Chambly attracted people to the area. Positions on the canal were sought after because they were "safe" jobs offering security, stability and freedom from stress; however, the hours were usually long – up to 12 hours a day at certain periods of the summer.[28] Rodolphe Lecompte, a lockmaster from 1922 to 1957, confirmed that employment on the canal was much coveted; the work

was not heavy, and in particular, it was not complicated and did not require much intelligence:

> Every day it was exactly the same thing. It might vary, of course, but not often. The political intrigue was tiresome. You had to be on guard all the time and not get mixed up in politics. On election days, during political campaigns, I stayed home. I didn't go to meetings, I didn't even go out; I did my work and went home. I said to myself, "What will I do if I don't work here; this is where I want to earn my living and I intend to stay here." [Translation.][29]

It is not easy to discuss work without speaking of politics or, more precisely, patronage. This was true of the preceding period and it is equally applicable to the years under discussion here. Recollections and accounts of its incidence abound, and only a few will show that the civil service act of 1918 did not eradicate "protectionism" by bringing the Outside Service under the jurisdiction of the Civil Service Commission.

René L'Heureux, the former superintendent, recounted how the shameless exercise of patronage was supposed to cease during his term of office. When the Liberals came to power in 1936, they reportedly decided to end the practice, at least on the Chambly Canal. Cardin, the minister, personally assured the newly appointed L'Heureux of the change in 1937: "I have more trouble at Chambly than with all the rest of the Province" [translation]. In fact, as L'Heureux admitted, hiring workers for the canal continued to be based upon political affiliation even after 1937: "when we needed a man, we asked the political organizer to send us one; it was the way things were done" [translation].[30] While this applied at the time to the casual workers, by the end of the thirties it had become quite unusual for a permanent or seasonal employee to be dismissed solely for reasons of patronage unless he had openly engaged in politically partisan activities.[31]

Ernest Beaulac, superintendent at the Saint-Ours lock in 1951 and later occupying the same position at the Chambly Canal, gave his account of the hiring practices at Saint-Ours:

> The skilled and unskilled workers were recruited exclusively in the Saint-Ours area. Recruiting was done through patronage; the man in charge of patronage in the parish hired his relatives and friends; you had to be on the right side of the government ... and be the right colour as well. He took people exclusively from Saint-Ours and Saint-Roch, the village on the opposite side of the river. [Translation.][32]

There were strings attached to patronage appointments. Several interviewees spoke of employees who had obtained employment through political influence and were expected to return the favour to friends of the party in their day-to-day activities. Beaulac referred to this aspect:

> Patronage was rampant; there was even a time when the workers weren't allowed to spend their wages in any store that wasn't patronage-

> approved; you had to buy your groceries there and if you went anywhere else, you risked losing your job. [Translation.][33]

Politics and partisanship thus played a major role in the lives and careers of the canal employees; the casual and seasonal workers, at the lower end of the scale, were particularly vulnerable. Rodolphe Lecompte, who started as a seasonal lock tender at Chambly in 1920, still remembers the warnings he received from his fellow workers when he took up his duties: "they told me that when there was a change of government, the men didn't wait to be told; they picked up their bags and tool kits and left. They knew they were out." [Translation.][34] At the top of the local pyramid, the superintendent was little better off; his days, too, were numbered if power changed hands. There is no need to continue this recital; a number of dismissals have already been mentioned, and one need only recall the names of a few Chambly Canal superintendents: Christophe Préfontaine, Louis Ouimet, Cornelius Ulrich, P.B. Benoit, A.P. Jodoin, J.E. Robitaille, and others.

The Great Depression of the thirties was an equally vivid memory for the interviewees, and their reminiscences bring up several important questions. Former lockmaster Zotique Potvin, who worked at the Chambly Canal from 1920 to 1959, recalled that

> The big crisis was in 1932. The Chambly Canal was closed and we worked by the day; we only operated the locks when a Murray [a barge from New York belonging to the Murray Company] came through. There was no more trade, nothing.
>
> For a while, before we worked by the day, they put us on the locks anyway, but 24 hours a day; we had to do that for one week and the [following] week we worked by the day. They set up beds for us and if a barge or something came along, we got up and passed it through. We were on duty 24 hours and we did that from 1933 to 1935.
>
> There was a lot of unemployment in the area, and everything was very dear. We were among the lucky ones, because I had a free house. In 1936 we went back to the old system: twelve hours each shift. The Liberal government came to power, salaries were increased a little and the crisis ended. It was the Liberals that reopened the canal, because as far as we were concerned, the canal had been closed. [Translation.][35]

Potvin recounted one particularly revealing episode to show how the lockmasters on the Chambly Canal finally got the better of Superintendent J.H. Cantin in 1936. Cantin, who had been appointed in 1932, was considered by the canal employees (particularly the permanent staff) to have been responsible for the deterioration in their working conditions during the Depression:

> It was his fault that our salaries were cut. The permanents had been working twelve months a

> year; when he was named superintendent, by the Conservative party of course, they claimed they didn't need us during the winter. So they laid us off.
>
> After that I went to see Colonel A.E. Dubuc who was the [superintending] engineer; he had hired me. I was president of the lockmasters' association and I said to him, "They've taken away our permanent jobs." Then the colonel put us on half pay for the winter; we won that much anyway; we worked half days. [Translation.][36]

While Zotique Potvin recalled the abuse heaped upon Cantin, his fellow lockmaster, Rodolphe Lecompte, remembered particularly his own fortunate position during the dark years of the Depression:

> I was really lucky, I was never in want. We worked 8 to 12 days a month, sometimes 15 days at a time, and I got $48.00 a month. I had that house rent-free and I grew potatoes and everything I needed to eat. All I had to buy was my meat, milk and bread. My wife was very thrifty and a good seamstress; she made my clothes. [Translation.][37]

There are many other aspects of the lives and working conditions of the canal worker that could be explored through interviews of this kind with former employees.[38] Indeed, an entire study should be devoted to information garnered through such viva-voce research; however, as mentioned above, there should be a sufficiently large number of interviews to allow comparison of statements. Nevertheless, this study makes as much use as possible of this special source (focussing on general topics rather than overly specific areas) in order not only to benefit from the information obtainable, but also to demonstrate the value of this type of research in a study such as this.

Conclusion

The final chapter of a study such as this, essentially an overview of the history of the canals work force and an attempt to discern its main features, usually takes the form of findings and hypotheses rather than definite conclusions. Because of the relativity of human experience, its import can only be absorbed little by little, through careful matching and comparison of points of reference. Thus the situation of the rural government worker can be properly assessed only when it has been more thoroughly analysed and compared with that of workers in the private, urban, industrial and other sectors. In terms of fact, however, what has been learned?

This has been an evolutive study, and it was to be expected that the canal worker of 1930 would differ in many respects from his predecessor of 1840 or 1850; in the course of a century, the canals developed from a disorganized and totally inept operation into a typical bureaucracy.

During the first ten years of the Chambly Canal's existence, its staff was kept to a bare minimum: one superintendent-lockmaster and three lock tenders took care of nine locks; there were no bridge keepers. The superintendent reported to a secretary of Public Works who changed location when the capital moved and who was more concerned with keeping costs down than with setting up a functional organization. By 1911, the high point in the life of the canal, it employed no fewer than 220 people during the navigation and off seasons. At that time the canal was virtually self-sufficient in terms of administration, operation, maintenance and even construction.

The key to this remarkable development was the establishment in 1850 of a regional administration for the canals. Senior officials in the capital were quite incapable of dealing with the day-to-day running of the canals or with the setting up of effective operating structures and systems. They accordingly created the position of superintending engineer as a sort of regional link or channel between the national and local levels of management.

The superintending engineer was much more than a mere observer or agent. From his office in Montreal, John G. Sippell demonstrated above all his concern for the establishment of structures and standards that would ensure maximum effectiveness in the operation of the canals. His recommendations, which were usually listened to and followed, touched upon all the day-to-day activities of the canals, including control of navigation. The most urgent need, however, was the organization of the work force, and during his 25 years as superintending engineer, Sippell devoted his efforts to developing an operating system.

In addition to organizing the regional office in Montreal, which comprised the administrative staff of the canals, the engineers and technical support personnel, the superintending engineer defined the duties, status, remuneration and working conditions of employees at the

various canals and determined the manpower requirements. His basic criteria in the selection of personnel were competence, versatility, economy, efficiency and loyalty, and these applied to canal superintendents, seasonal employees and labourers alike.

The application of these standards, beginning in the 1860s, raised the calibre of the work force on the Richelieu canals to a level which was maintained until approximately 1888. At that juncture, budget restrictions necessitated by the recession and the exercise of political patronage combined to undo much that these hiring principles had accomplished. The situation continued to deteriorate over the following years, despite the existence of the Civil Service Commission. After 1918 the absolute preference in employment accorded veterans of the Great War served to delay further any return to Sippell's policies.

If there was one aspect of working life on the canals that emerged clearly from this study, it was the vulnerability of the workers to economic recessions and political interference. The recessions had impacts on traffic and led to lay-offs and wage freezes. The casual and seasonal employees were the most directly affected, and there was much competition for permanent positions.

From the 1870s on, these uncertainties and fears were compounded by the spectre of palace revolutions. Following Confederation in 1867, the exercise of patronage by the two political parties increased by leaps and bounds, with each subsequent change of government bringing greater excesses. Along the canals, superintendents were swept out at an unprecedented rate, often carrying other workers, including permanent employees, along with them. Despite the climate of fear, the workers realized that the situation could work to their advantage; by ranging themselves behind a member of Parliament on the government side, they could circumvent the frequently arbitrary manoeuvres of the superintendent or the superintending engineer. It was a dangerous game and the rewards were often short-lived.

The years brought significant changes in working conditions. From the 1850s on, Sippell had endeavoured to standardize working hours, salaries and benefits, as well as duties and responsibilities, on all the Quebec canals. He was only partially successful. Salaries on the Richelieu were for a long time lower than elsewhere, ostensibly because the cost of living was below that in the urban centres. While the permanent staff had little reason to complain, the same could not be said of the casual or seasonal employees; they worked longer hours and were paid less than their counterparts in the private sector, but as country dwellers, they had little choice of employment.

What avenues were open to the workers to present complaints they might have of inequities or injustice? For many years, they could only rely on the good will of the superintendent or the superintending engineer; however, with the emergence of political power on the canals, they quickly discovered the efficacy of representations by MPs or ministers, and they availed themselves of this support on the slightest pretext. The role of workers' associations is difficult to define. While there is mention of a local section of the "civil service" and of a lockmasters' association during the thirties, it is not clear whether these were associated with any militant union activity. No documentation has

been found that might shed light on this question. Historian Nancy Stunden stated recently that until 1960, Canadian archivists were not particularly interested in preserving material relating to the labour field or to workers' associations. Fortunately, however, the situation changed in the early sixties: "the ideal of working to preserve an image representative of the total society started to dislodge the traditional conception of the passive role of archives."[1]

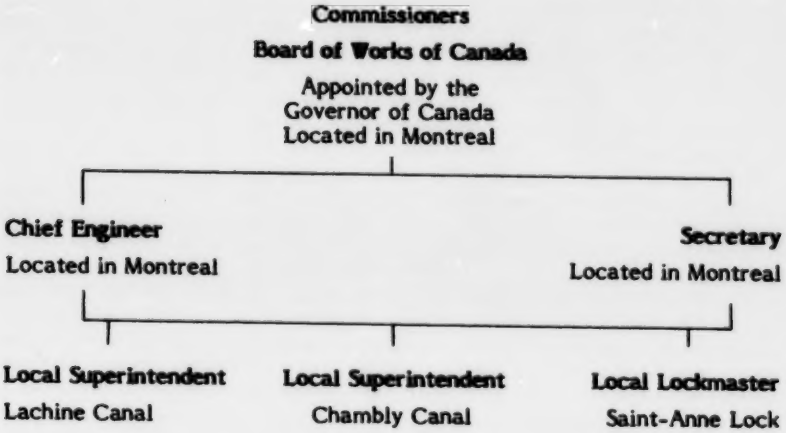
At the national level, the union movement in the Canadian public service was more concerned, even in the 20th century, with questions of its existence and recognition than with the problems of its members or of local units. As Bill Doherty pointed out, moreover, the union representatives, who were usually under the thumb of the employer, had a tendency to reflect "only the views approved by senior personnel," and they directed their energies toward causes of doubtful merit, as for example, the formation of the Civil Service Amateur Athletic Association in 1905.[2]

The union fervour of the Richelieu canal employees might have been greater had they not developed other defence mechanisms and means of recourse over the years: the even-handed "paternalism" of superintending engineer Sippell in the 19th century and the use of local political leverage after 1878 and even well into the 20th century.

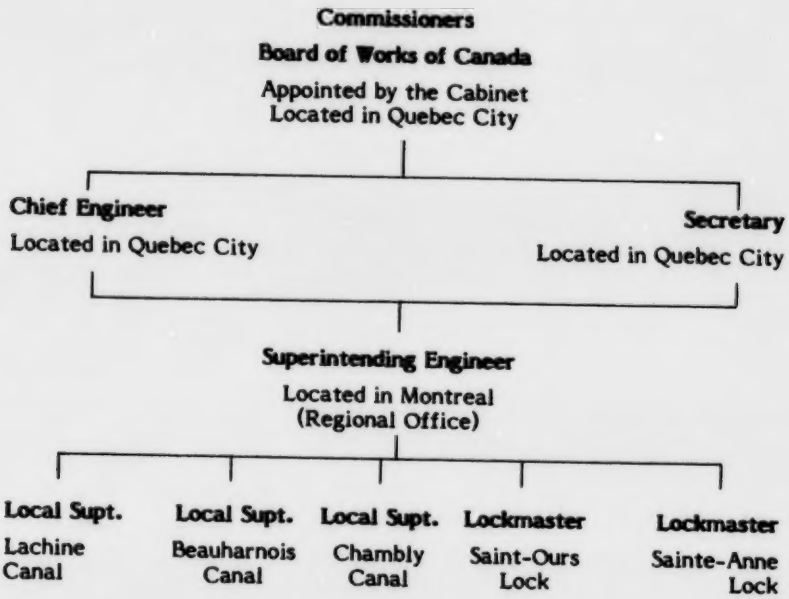
There were many changes in the nature of the work done on the canals. Workers with new skills, such as mechanics and electricians, appeared in response to scientific developments and changing needs. The same evolution occurred in the administrative offices; Sippell and his assistant, who in 1855 had dealt with both routine paperwork and engineering matters, were replaced by a larger staff with a variety of qualifications.

The Richelieu canals, though shorn of their commercial role, are still in service today. They are used by pleasure craft and they offer their many visitors a glimpse of a vanished way of life. The old stones bear mute testimony to men's labour – the labour of those who built the canals, of those who travelled on them and, especially perhaps, of those who served them for more than a century. Their lives should not be left in obscurity, nor should their accomplishments go unrecorded.

Appendix A
Organization Chart of the Quebec Canals, 1843



Appendix B
Organization Chart of the Quebec Canals, 1852



Appendix C
Organization Chart of the Quebec Canals, 1867

Notes

I Historiography and the Search for a Context

1 H. Espesset, J.-P. Hardy and T. Ruddell, "Le monde du travail au Québec au XVIII[e] et au XIX[e] siècles: historiographie et état de la question," Revue d'histoire de l'Amérique française, Vol. 25, No. 4 (March 1972), pp. 499-500.

2 André E. Leblanc and James D. Thwaites, Le monde ouvrier au Québec: bibliographie rétrospective (Montreal: Les Presses de l'université du Québec, 1973), 283 pp.

3 Fernand Harvey, "Les travailleurs québécois au XIX[e] siècle: essai d'un cadre d'analyse sociologique," Revue d'histoire de l'Amérique française, Vol. 25, No. 4 (March 1972), p. 540.

4 Among the works referred to: R.H. Coats, The Labor Movement in Canada (Toronto: Edinburgh University Press, 1913), pp. 277-355; H.A. Logan, The History of Trade-Union Organization in Canada (Chicago: University of Chicago Press, 1928), 423 pp.; J.-P. Després, Le mouvement ouvrier canadien (Montreal: Fides, 1946), 205 pp.; Douglas R. Kennedy, The Knights of Labor in Canada (London, Ont.: University of Western Ontario Press, 1956), 127 pp.; Louis-Laurent Hardy, Brève histoire du syndicalisme ouvrier (Montreal: Editions de l'Hexagone, 1958), 152 pp.; Charles Lipton, The Trade Union Movement in Canada, 1827-1959 (Montreal: Canadian Social Publications, 1966), 366 pp.

5 One of the most original treatments of this subject is that by R. Desrosiers and D. Héroux, Le travailleur québécois et le syndicalisme (Montreal: Editions de Sainte-Marie, 1966), 120 pp.

6 Works referred to include: H.A. Innis, Select Documents in Canadian Economic History, 1497-1783 (Toronto: University of Toronto Press, 1929); W.T. Easterbrook and Hugh G.J. Aitken, Canadian Economic History (Toronto: Macmillan, 1967); Fernand Ouellet, Histoire économique et sociale du Québec, 1760-1850 (Montreal: Fides, 1966).

7 H. Espesset, J.-P. Hardy and T. Ruddell, op. cit., p. 506.

8 Jean Hamelin and Yves Roby, Histoire économique du Québec, 1851-1896 (Montreal: Fides, 1971), 436 pp.

9 P.-A. Linteau, R. Durocher and J.-C. Robert, Histoire du Québec contemporain: de la Confédération à la crise, 1867-1929 (Montreal: Boréal Express, 1979), 660 pp.

10 H. Espesset, J.-P. Hardy and T. Ruddell, op. cit., p. 538.

11 The following are examples: N. Bélanger et al., Les travailleurs québécois, 1851-1896 (Montreal: Presses de l'université du Québec, 1973), 221 pp.; J. de Bonville, Jean-Baptiste Gagnepetit: les travailleurs montréalais à la fin du XIX[e] siècle (Montreal: Editions de l'Aurore, 1975), 253 pp.; André E. Leblanc and James D. Thwaites, op. cit., 283 pp.

12 N. Bélanger et al., op. cit., p. 31.

13 H.C. Pentland, "The Lachine Strike of 1843," Canadian Historical Review, Vol. 29, No. 3 (Sept. 1948), pp. 255-77; Léon Pouliot, "Un conflit ouvrier au canal de Beauharnois en 1843," Bulletin des Recherches Historiques, Vol. 62, No. 3 (1956), pp. 149-55.

14 Fernand Harvey, op. cit., p. 542.

15 H. Espesset, J.-P. Hardy and T. Ruddell, op. cit., p. 528.

16 Robert M. Dawson, The Civil Service of Canada (London: Oxford University Press, 1929), (hereafter cited as The Civil Service), 266 pp.

17 W.L. Grant, "The Civil Service of Canada," University of Toronto Quarterly, Vol. 3, No. 4 (July 1934), pp. 428-38; W.R. Sharp, "The Evolution of the Civil Service," University of Toronto Quarterly, Vol. 8, No. 2 (Jan. 1939), pp. 155-64; Taylor Cole, The Canadian Bureaucracy: A Study of Canadian Civil Servants and Other Public Employees (Durham, North Carolina: Duke University Press, 1949) (hereafter cited as Canadian Bureaucracy), 292 pp.; J.E. Hodgetts, "Challenge and Response: A Retrospective View of the Public Service of Canada," Journal of the Institute of

Public Administration of Canada, Vol. 7, No. 4 (1964), pp. 409-21.

18 Robert M. Dawson, "Canadian Civil Service before Confederation," Canadian Historical Review, Vol. 5, No. 2 (1924), pp. 118-31.

19 J.E. Hodgetts, Pioneer Public Service: An Administrative History of the United Canadas, 1841-1867 (Toronto: University of Toronto Press, 1955), 305 pp.

20 Taylor Cole, "Wartime Trends in the Dominion Civil Service in Canada," Public Administration Review, Vol. 6, No. 2 (1946), pp. 157-67.

21 Bernard Angers, "Syndicats ouvriers et syndicats de fonctionnaires," MA thesis, Laval University, Quebec, 1963, 93 pp.

22 Taylor Cole, Canadian Bureaucracy, p. 10.

II Trial and Error: 1843-1852

1 Canada. Public Archives. Public Records Division (hereafter cited as PRD), Records of the Department of Public Works (RG11) (Ottawa: 1977), p. 1.

2 Ibid., p. 1.

3 Robert M. Dawson, The Civil Service, p. 3.

4 Ibid., pp. 10, 14.

5 Ibid., p. 14.

6 Denis Vaugeois and Jacques Lacoursière, Canada-Québec, synthèse historique (Montreal: Editions du Renouveau Pédagogique, 1970), p. 358.

7 Canada. Public Archives. Manuscript Division (hereafter cited as PAC), RG11, Vol. 65, No. 20575, J. Page to J.G. Sippell, Montreal, 2 Sept. 1843.

8 Ibid., RG4, C1, 1843, Vol. 80, No. 1014, chairman, Board of Works, to D. Daly, 14 Aug. 1843.

9 Ibid., RG11, Vol. 55, No. 36, M. Borne to commissioners, Board of Works, Chambly, 11 Oct. 1848.

10 Ibid.

11 Ibid., M. Borne to the Hon. J. Chabot, Chambly, 17 March 1850.

12 Ibid.

13 Ibid.

14 Ibid., M. Borne to T.A. Begley, Chambly, 22 Feb. 1852.

15 Canada. Dept. of the Environment. Parks Canada. Quebec Regional Office, Historical and Archaeological Research, Quebec Canals (hereafter cited as PCQ), Letterbooks, 1852, J.F. McDonald to M. Lassiseraye, Montreal, 22 July 1852.

16 PAC, RG11, Vol. 55, No. 36, M. Borne to T.A. Begley, Chambly, 22 Feb. 1852.

17 Ibid., No. 35, M. Borne, "Schedule or return of Lock Tenders employed on the Chambly Canal from 1st November 1843," Chambly, Nov. 1843.

18 Ibid.

19 Ibid.

20 Ibid., Vol. 39, G. Keefer to T.A. Begley, 1 March 1843.

21 Canada. Department of Public Works, Rapport général du commissaire des Travaux publics pour l'année expirée le 30 juin 1867 (Ottawa: Hunter, Rose and Lemieux, 1868) (hereafter cited as DPW, Rapport ... 1867), p. 33.

22 PAC, RG11, Vol. 55, No. 35, M. Borne to the Hon. W.B. Robinson, Chambly, 27 May 1847.

23 Ibid., M. Borne to T.A. Begley, Chambly, 11 June 1847.

24 Ibid., No. 36, M. Borne to J.W. Dunscomb, Chambly, 23 June 1849.

25 Ibid., M. Borne to the Hon. J. Chabot, Chambly, 17 March 1850.

26 Ibid., M. Borne to T.A. Begley, Chambly, 22 Feb. 1852.

27 Ibid., No. 35, M. Borne to the Hon. W.B. Robinson, Chambly, 27 May 1847.

28 PCQ, Letterbooks, 1852, J.F. McDonald to T.A. Begley, Montreal, 1 April 1852.

29 Ibid.

30 Ibid., C. Legge to T.A. Begley, Montreal, 26 Aug. 1852.

31 Ibid., "Estimate of improvement and repairs necessary on the Chambly Canal," Montreal, 1 April 1852.

32 PAC, RG11, Vol. 55, No. 35, M. Borne to T.A. Begley, Chambly, 14 Dec. 1846.

33 Ibid., M. Borne to T.A. Begley, Chambly, 5 Dec. 1847.

34 Ibid., M. Borne to T.A. Begley, 6 March 1844.

35 Ibid., M. Borne to T.A. Begley, Chambly, 5 Dec. 1847.

36 DPW, Rapport ... 1867, p. 34.

37 René L'Heureux, Canal de Chambly: 100 ans de service, 1843-1943 (Saint-Jean,

Que.: Editions du Richelieu, 1943), pp. 39-40.
38 PCQ, Letterbooks, 1852-54, C. Legge to T.A. Begley, Montreal, Sept. 1852.
39 Ibid., J. Page to T.A. Begley, Montreal, 11 Oct. 1852.
40 Ibid., J. Page to T.A. Begley, Montreal, 5 April 1853.
41 PAC, RG11, Vol. 63, file 4, R.H. Harrison to S. Keefer, Saint-Ours, 31 Oct. 1849.
42 PCQ, Letterbooks, 1852-54, J. Page to T.A. Begley, Montreal, 18 March 1853.
43 Ibid., 1862-65, No. 472, J.G. Sippell to T. Trudeau, Montreal, 28 April 1863.
44 Ibid., 1852-54, J. Page to T.A. Begley, Montreal, 18 Aug. 1853.
45 PAC, RG11, Vol. 20, No. 21006, 23 Oct. 1853, "Sketch of Lock and part of Island at St Ours, with Plan of Superintendant's House."
46 Ibid., J.G. Sippell to T.A. Begley, 17 Oct. 1853.
47 Ibid.
48 Ibid.

III Organization and Uncertainty: 1852-1867

1 P.-André Sévigny, Le canal Chambly: utilisation commerciale, Travail inédit No. 346 (Ottawa: Parks Canada, 1978), pp. 20-2.
2 Ibid., p. 37.
3 Albert Tessier, "Un projet de canalisation du Richelieu en 1855," Cahier des Dix, Vol. 26 (1961), pp. 199-210.
4 Sandra J. Gillis, The Chambly Canal: A Structural History of the Locks, Manuscript Report Series No. 170 (Ottawa: Parks Canada, 1975), pp. 8-9.
5 PRD, op. cit., pp. 1-2.
6 PAC, RG11, Vol. 65, No. 18413, J.F. McDonald to T.A. Begley, 30 Nov. 1851.
7 Ibid., No. 20379, J. Page to T.A. Begley, Montreal, 15 Aug. 1853.
8 Ibid., No. 20575, J. Page to J.G. Sippell, Montreal, 2 Sept. 1853.
9 PCQ, Letterbooks, 1852-54, J. Page to T.A. Begley, Montreal, 7 Oct. 1852.
10 Ibid., 1859-62, J.G. Sippell to T.A. Trudeau, Montreal, 30 May 1861.
11 PAC, RG11, Vol. 35, No. 39804, J.G. Sippell to commissioners of Public Works, Montreal, 24 Jan. 1859.
12 Canada, The Blue Book, or Statement of the Public Service of the Former Province of Canada for the half-year ended 30th June 1867 (Ottawa: Hunter, Rose and Company, 1868) (hereafter cited as The Blue Book), p. 58.
13 PCQ, Letterbooks, 1852-54, J. Page to T.A. Begley, Montreal, 7 Oct. 1852.
14 PAC, RG11, Vol. 35, No. 39804, J.G. Sippell to commissioners of Public Works, Montreal, 24 Jan. 1859.
15 Canada The Blue Book, p. 58.
16 Ibid., pp. 57-8, 68.
17 H. Espesset, J.-P. Hardy and T. Ruddell, op. cit., p. 526.
18 PCQ, Letterbooks, 1859-62, No. 683, p. 387, T. Trudeau to J.G. Sippell, Quebec City, 22 Feb. 1861.
19 Ibid., 1858-59, pp. 281-4, J.G. Sippell to commissioners of Public Works, Montreal, 14 June 1859.
20 DPW, Rapport ... 1867, App. 60, pp. 436-7.
21 PCQ, Letterbooks, 1862-65, No. 1355, annual report of J.G. Sippell to F. Braun, Montreal, 2 Dec. 1864.
22 Ibid., 1852-54, pp. 6-7, C. Legge to T.A. Begley, Montreal, Sept. 1852.
23 Ibid.
24 Ibid., 1858-59, pp. 246-8, petition by residents of Chambly, Chambly, 21 March 1859; J.G. Sippell to commissioners of Public Works, Montreal, 30 April 1859.
25 Ibid., 1855-57, J.G. Sippell to T.D. Booth, Montreal, 7 Feb. 1857.
26 Ibid., 1859-62, No. 298, pp. 187-91, J.G. Sippell to secretary of Public Works, Montreal, 8 May 1860.
27 Ibid., 1862-65, No. 676, J.G. Sippell to T. Trudeau, Montreal, 22 Sept. 1863.
28 Ibid., 1852, J.F. McDonald to T.A. Begley, Montreal, 11 May 1852.
29 Ibid., 1857-59, pp. 200-2, J.G. Sippell to Lévi Larue, Montreal, 7 May 1858.
30 Ibid., 1859-62, No. 1355, p. 640, J.G. Sippell to P.T. Chartier, Montreal, 14 May 1862.
31 Ibid., 1862-65, No. 733, J.G. Sippell to C. Préfontaine, Montreal, 4 Nov. 1863.
32 Ibid., 1857-59, pp. 200-2, J.G. Sippell to L. Larue, Montreal, 7 May 1858.
33 Ibid., 1857-59, p. 354, J.G. Sippell to L. Larue, Montreal, 27 Dec. 1858.

34 Ibid., 1852-54, p. 424, J.G. Sippell to A. Bissett, Montreal, 24 Feb. 1854.
35 Ibid., 1865-70, No. 1029, J.G. Sippell to C. Préfontaine, Montreal, 10 March 1867.
36 Ibid., No. 1027, J.G. Sippell to L. Larue, Montreal, 10 March 1867.
37 Ibid., 1857-59, p. 242, J.G. Sippell to P.T. Chartier, Montreal, 1 July 1858.
38 Ibid., 1862-65, No. 1359, J.G. Sippell to C. Préfontaine, Montreal, 20 Dec. 1864.
39 Ibid., 1865-70, No. 118, J.G. Sippell to C. Préfontaine, Montreal, 28 Dec. 1865.
40 Canada, The Blue Book, pp. 59, 60, 68.
41 PCQ, Letterbooks, 1865-70, No. 1706, J.G. Sippell to F. Braun, Montreal, 8 Nov. 1869.
42 Canada, The Blue Book, pp. 68-9.
43 PCQ, Letterbooks, 1859-62, No. 802, p. 425, J.G. Sippell to T. Trudeau, Montreal 22 April 1861.
44 Ibid., 1865-70, No. 1706, J.G. Sippell to F. Braun, Montreal, 8 Nov. 1869.
45 PAC, RG11, Vol. 35, No. 39804, J.G. Sippell to commissioners of Public Works, Montreal, 24 Jan. 1859.
46 PCQ, Letterbooks, 1862-65, No. 472, J.G. Sippell to T. Trudeau, Montreal, 28 April 1863.
47 Canada, The Blue Book, pp. 43, 68.
48 PCQ, Letterbooks, 1854-56, pp. 143-4, J.G. Sippell to P.T. Chartier, Montreal, 12 Dec. 1854.
49 Ibid., 1857-59, p. 68, J.G. Sippell to P.T. Chartier, Montreal, 9 Nov. 1857.
50 Canada, The Blue Book, pp. 68-9.
51 PAC, RG11, Vol. 35, No. 39804, J.G. Sippell to commissioners of Public Works, Montreal, 24 Jan. 1859.
52 PCQ, Letterbooks, 1870-74, No. 1082, J.G. Sippell to L. Larue, Montreal, 26 Nov. 1872.
53 Ibid., 1862-65, No. 881, J.G. Sippell to T. Trudeau, Montreal, 30 Jan. 1864.
54 Ibid., 1895-96, p. 835, E. Marceau to C. Schreiber, Montreal, 7 Dec. 1895.
55 Ibid., 1876-77, pp. 801-2, G.F. Baillargé to L. Ouimet, Montreal, 11 Sept. 1877.
56 Ibid., 1870-74, No. 1082, J.G. Sippell to L. Larue, Montreal, 26 Nov. 1872.
57 PAC, RG11, Vol. 35, No. 39804, J.G. Sippell to commissioners of Public Works, Montreal, 24 Jan. 1859.
58 DPW, Rapport ... 1867, App. 47, pp. 402-3.
59 PCQ, Letterbooks, 1857-59, pp. 62-3, J.G. Sippell to T.A. Begley, Montreal, 23 Oct. 1857.
60 Ibid., 1852-54, p. 357, J.G. Sippell to T.A. Begley, Montreal, 24 Oct. 1853.
61 Ibid., p. 330, J. Page to I. Larocque, Montreal, 26 Aug. 1853.
62 Ibid., 1859-62, No. 964, p. 491, J.G. Sippell to T. Trudeau, Montreal, 16 July 1861.
63 Ibid., 1855-57, J.G. Sippell to M. FitzPatrick, Montreal, 25 April 1857.
64 Ibid., 1865-70, No. 720, J.G. Sippell to P. Laurencel, Montreal, 31 May 1867.
65 Ibid., 1855-57, J.G. Sippell to T.A. Begley, Montreal, 11 May 1857.
66 Ibid., 1862-65, No. 663, J.G. Sippell to P.T. Chartier, Montreal, 9 Sept. 1863.
67 Ibid., No. 209, J.G. Sippell to T. Trudeau, Montreal, 10 Sept. 1862.
68 Ibid., 1857-59, pp. 265-6, J.G. Sippell to T.A. Begley, Montreal, 14 July 1858.
69 Ibid., 1862-65, No. 913, J.G. Sippell to C. Préfontaine, superintendent, Chambly Canal, Montreal, 1 March 1864.
70 Ibid., 1865-70, No. 705, J.G. Sippell to F. Braun, Montreal, 20 May 1867.
71 Ibid., 1862-65, No. 1359, J.G. Sippell to C. Préfontaine, Montreal, 20 Dec. 1864.
72 Ibid., No. 928, J.G. Sippell to C. Préfontaine, Montreal, 9 March 1864.
73 Ibid., 1854-56, p. 103, J.G. Sippell to T.A. Begley, Montreal, 18 Sept. 1854; pp. 409-10, J.G. Sippell to T.A. Begley, Montreal, 3 May 1856.
74 Ibid., 1862-65, No. 1245, J.G. Sippell to F. Braun, Montreal, 8 Oct. 1864.
75 Ibid., No. 662, J.G. Sippell to T. Trudeau, Montreal, 5 Sept. 1863.
76 Ibid., 1854-56, p. 25, J.G. Sippell to T.A. Begley, Montreal, 7 April 1854.
77 Ibid., pp. 7-8, J.G. Sippell to T.A. Begley, Montreal, 22 March 1854.
78 Ibid., 1855-57, J.G. Sippell to L. Bergeron, Montreal, 7 May 1857.
79 Canada, The Blue Book, pp. 42-3.
80 Ibid., p. 68.
81 Ibid., p. 43.
82 PCQ, Letterbooks, 1862-65, No. 1487, J.G. Sippell to F. Braun, Montreal, 6 April 1865.
83 DPW, Rapport ... 1867, App. 3, p. 33.

84 Ibid., p. 30.
85 PCQ, Letterbooks, 1865-70, No. 1615, J.G. Sippell to C. Préfontaine, Montreal, 2 Sept. 1869.
86 Ibid., 1859-62, No. 1386, p. 653, J.G. Sippell to T. Trudeau, Montreal, 11 June 1862.
87 Ibid., 1862-65, No. 594, J.G. Sippell to T. Trudeau, Montreal, 17 July 1863.
88 Ibid., No. 1068, J.G. Sippell to J. Thompson, Montreal, 6 July 1864.
89 Ibid., 1877-78, p. 195, G.F. Baillargé to L. Ouimet, Montreal, 27 Nov. 1877.
90 PCQ, Pay book of Chambly Canal employees, Sept. 1866 to April 1869, n.p. The information in Table 2 is taken from pay lists covering all months of 1867.
91 Ibid., Pay book of Chambly Canal employees, April 1867.
92 Ibid.
93 Ibid., Letterbooks, 1874-76, No. 1000, p. 371, J.G. Sippell to C. Préfontaine, Montreal, 2 Feb. 1876.
94 Ibid., 1857-59, J.G. Sippell to T.A. Begley, Montreal, 14 July 1858.
95 PAC, RG11, Vol. 237, Nos. 1024 to 1039, Regulations for the Management and Protection of the Provincial Canals, 20 May 1857, sect. 15.
96 PCQ, Letterbooks, 1854-56, p. 260, J.G. Sippell to P.T. Chartier, Montreal, 14 July 1855.
97 Ibid., 1859-62, No. 1364, p. 643, J.G. Sippell to T. Trudeau, Montreal, 16 May 1862.
98 Ibid., 1865-70, No. 704, J.G. Sippell to F. Braun, Montreal, 20 May 1867; No. 772, J.G. Sippell to C. Préfontaine, Montreal, 6 July 1867.
99 Canada, The Blue Book, p. 69.

IV Expansion and Economic Crises: 1867-1896

1 PRD, op. cit., p. 1.
2 Ibid., p. 2.
3 Thomas E. Appleton, Usque ad mare: History of the Canadian Coast Guard and Marine Services (Ottawa: Queen's Printer, 1969), p. 228.
4 Taylor Cole, Canadian Bureaucracy, p. 13.
5 PCQ, Letterbooks, 1870-74, No. 170, J.G. Sippell to L. Larue, Montreal, 8 May 1871.
6 Ibid., No. 270, J.G. Sippell to C. Préfontaine, Montreal, 10 July 1871.
7 Ibid., 1874-76, No. 1039, pp. 382-3, J.G. Sippell to F. Braun, Montreal, 25 Feb. 1876.
8 Ibid., 1888-90, L.A. Lesage to P.B. Benoit, Montreal, 19 April 1890.
9 Robert M. Dawson, The Civil Service, p. 47.
10 PCQ, Letterbooks, 1892-93, E.H. Parent to C. Schreiber, Montreal, 28 Dec. 1892.
11 R. Desrosiers and D. Héroux, op. cit., p. 23.
12 Ibid., p. 22.
13 Denis Vaugeois and Jacques Lacoursière, op. cit., pp. 427-8.
14 Ibid., p. 428.
15 PCQ, Letterbooks, 1877-78, G.F. Baillargé to F. Braun, Montreal, 29 Dec. 1877.
16 Denis Vaugeois and Jacques Lacoursière, op. cit., pp. 416-7.
17 Sandra J. Gillis, op. cit., pp. 9-10.
18 PCQ, Letterbooks, 1870-74, No. 325, J.G. Sippell to L. Larue, Montreal, 4 Aug. 1871.
19 Ibid., No. 1273, J.G. Sippell to C. Préfontaine, Montreal, 18 April 1873.
20 Ibid., No. 806, J.G. Sippell to F. Braun, 21 June 1872.
21 Ibid., No. 1542, J.G. Sippell to C. Préfontaine, Montreal, 30 Sept. 1873.
22 Ibid., No. 503, J.G. Sippell to F. Braun, Montreal, 4 Nov. 1871.
23 Ibid., No. 175, J.G. Sippell to F. Braun, Montreal, 9 May 1871.
24 PAC, RG11, Vol. 337, No. 65016, Petition by Chambly Canal bridge keepers to Department of Public Works, Chambly, 5 Feb. 1877.
25 PCQ, Letterbooks, 1876-77, J.G. Sippell to F. Braun, Montreal, 28 June 1877.
26 Ibid., 1874-76, No. 1135, p. 418, J.G. Sippell to F. Braun, Montreal, 24 April 1876.
27 Ibid., No. 397, p. 150, J.G. Sippell to F. Braun, Montreal, 23 Nov 1874.
28 Ibid., 1876-77, pp. 536-7, J.G. Sippell to F. Chaloux, Montreal, 13 June 1877.
29 Ibid., pp. 820-1, G.F. Baillargé to F. Braun, Montreal, 17 Sept. 1877.
30 Ibid., 1877-78, pp. 266-7, G.F. Baillargé to L. Ouimet, Montreal, 7 Dec. 1877.
31 Ibid., p. 473, G.F. Baillargé to L. Ouimet, Montreal, 7 Jan. 1878.
32 Ibid., 1874-76, No. 1130, p. 416, J.G. Sippell to F. Braun, Montreal, 14 April 1876.

33 Ibid., 1877-78, p. 460, G.F. Baillargé to L. Ouimet, Montreal, 4 Jan. 1878.
34 Ibid., 1874-76, No. 1200, p. 447, J.G. Sippell to F. Braun, Montreal, 31 May 1876.
35 Ibid., 1877-78, pp. 144-5, G.F. Baillargé to F. Braun, Montreal, 17 Nov. 1877.
36 Ibid., 1878, pp. 227-31, G.F. Baillargé, memorandum to unidentified addressee, Montreal, 18 May 1878.
37 Ibid., 1876-77, pp. 343-4, J.G. Sippell to F. Braun, Montreal, 9 March 1877.
38 Ibid., 1878, p. 95, G.F. Baillargé to L. Ouimet, Montreal, 8 April 1878.
39 Ibid., 1878-80, p. 633, J.G. Sippell to J.H. Black, Montreal, 11 Sept. 1879.
40 Ibid., p. 488, J.G. Sippell to L. Ouimet, Montreal, 13 May 1879.
41 Denis Vaugeois and Jacques Lacoursière, op. cit., p. 431.
42 Ibid., p. 446.
43 PCQ, Letterbooks, 1878-80, p. 534, J.G. Sippell to C. Ulrich, Montreal, 18 June 1879.
44 Ibid., 1881-84, p. 36, E.H. Parent to F. Braun, Montreal, 17 Jan. 1882.
45 Ibid., p. 440, E.H. Parent to A.P. Bradley, Montreal, 30 Oct. 1882.
46 Ibid., p. 865, E.H. Parent to A.P. Bradley, Montreal, 25 Sept. 1883.
47 Canada. Parliament, Sessional Papers (Ottawa: Queen's Printer, 1867-) (hereafter cited as CP, Sessional Papers), 1885, No. 11.
48 PCQ, Letterbooks, 1887-88, p. 727, L.A. Lesage to P.B. Benoit, Montreal, 21 May 1888.
49 Ibid., p. 316, E.H. Parent to P.B. Benoit, Montreal, 9 Sept. 1887.
50 Ibid., 1880-81, pp. 580-1, E.H. Parent to F. Braun, Montreal, 20 Dec. 1880.
51 Ibid., 1881-84, p. 230, L.A. Lesage to C. Ulrich, Montreal, 29 May 1882.
52 Ibid., p. 739, L.A. Lesage to C. Ulrich, Montreal, 11 July 1883.
53 Ibid., 1884-87, pp. 453-4, E.H. Parent to A.P. Bradley, Montreal, 28 July 1885.
54 Ibid., 1878, p. 355, G.F. Baillargé to F. Braun, Montreal, 14 June 1878; 1880-81, p. 763, E.H. Parent to F. Braun, Montreal, 20 April 1881; 1881-84, pp. 225-6, E.H. Parent to F. Braun, Montreal, 25 May 1882; 1881-84, pp. 562-3, E.H. Parent to A.P. Bradley, Montreal, 31 Jan. 1883.
55 Ibid., 1881-84, pp. 288-9, E.H. Parent to A.P. Bradley, 28 June 1882.
56 Ibid., 1892-93, p. 872, circular letter from E.H. Parent to nine lock labourers, Montreal, 1 Feb. 1893.
57 Ibid., pp. 377-8, E.H. Parent to T. Trudeau, Montreal, 30 June 1892.
58 Ibid., 1895-96, p. 526, Ernest Marceau to P.B. Benoit, Montreal, 6 Sept. 1895.
59 Ibid., 1888-90, p. 288, E.H. Parent to P.B. Benoit, Montreal, 22 July 1889.
60 Ibid., 1892-93, pp. 927-8, P.B. Benoit to E.H. Parent, Montreal, 4 Nov. 1892.
61 Ibid., 1893-94, p. 277, E. Marceau to P.B. Benoit, Montreal, 26 Dec. 1893.
62 Ibid., 1888-90, p. 159, E.H. Parent to A.P. Bradley, Montreal, 16 April 1889.
63 Ibid., 1887-88, pp. 573-5, E.H. Parent to A.P. Bradley, Montreal, 8 Feb. 1888.
64 Ibid., 1888-90, pp. 373-4, E.H. Parent to A.P. Bradley, Montreal, 24 Sept. 1889.
65 Canada. Department of Trade and Commerce. Dominion Bureau of Statistics, Summary of Canal Statistics, 1848-1936 (Ottawa: 1937) (hereafter cited as DBS, Summary of Canal Statistics), pp. 27-29.
66 PCQ, Letterbooks, 1892-93, pp. 379-81, E.H. Parent to T. Trudeau, Montreal, 30 June 1892.
67 Ibid., p. 380.
68 Ibid.
69 Ibid., pp. 380-1.
70 Ibid., p. 381.
71 Ibid., p. 380.
72 Ibid., 1878-80, p. 330, J.G. Sippell to A. Bell, Montreal, 19 Feb. 1879.
73 Ibid., 1876-77, p. 25, J.G. Sippell to ___, Montreal, 7 Oct. 1876.
74 Ibid., 1892-93, p. 379, E.H. Parent to T. Trudeau, Montreal, 30 June 1892.
75 Ibid., 1887-88, pp. 430-1, L.A. Lesage to E.H. Parent, Montreal, 26 Nov. 1887; ibid., 1888-90, pp. 656-7, L.A. Lesage, A. Duchesneau and L.E. Trudeau to E.H. Parent, Montreal, 26 April 1890.
76 For a more detailed description of the work done between 1880 and 1898, see Sandra J. Gillis, op. cit., pp. 10-11.
77 PCQ, Letterbooks, 1865-70, No. 1838, J.G. Sippell to F. Braun, Montreal, 18 March 1870.
78 Ibid., 1877-78, pp. 893-4, 897, G.F. Baillargé to F. Braun, Montreal, 1 March 1878.
79 La Patrie (Montreal), 15 May 1879, p. 2; 21 May 1879, p. 2.

80 PCQ, Letterbooks, 1884-87, pp. 580-1, E.H. Parent to A.P. Bradley, Montreal, 11 Oct. 1885.
81 Ibid., p. 912, L.A. Lesage to P.B. Benoit, Chambly Canal, Montreal, 21 July 1886.
82 Ibid., 1870-74, No. 190, J.G. Sippell to F. Braun, Montreal, 16 May 1871.
83 Ibid., 1888-90, p. 171, E.H. Parent to A.P. Bradley, Montreal, 29 April 1889.
84 Ibid., 1887-88, pp. 784-5, E.H. Parent to A.P. Bradley, Montreal, 9 July 1888.
85 Ibid., 1865-70, No. 1385, J.G. Sippell to F. Braun, Montreal, 24 Feb. 1869.
86 Ibid., 1870-74, No. 1273, J.G. Sippell to C. Préfontaine, Montreal, 18 April 1873.
87 Ibid., 1880-81, p. 910, L.A. Lesage to C. Ulrich, Montreal, 3 Aug. 1881.
88 Ibid., 1887-88, pp. 253-6, E.H. Parent to A.P. Bradley, Montreal, 10 Aug. 1887.
89 Ibid., 1878, p. 120, G.F. Baillargé to L. Ouimet, Montreal, 12 April 1878.
90 Ibid., 1884-87, p. 970, L.A. Lesage to P.B. Benoit, Montreal, 30 Aug. 1886.
91 Ibid., 1893, p. 390, E. Marceau to P.B. Benoit, 12 June 1893.
92 Ibid., 1878, p. 867, T.W. Harrington to A.G. Gérard, Montreal, 8 Nov. 1878.
93 Ibid., 1881-84, p. 651, L.A. Lesage to L. Larue, Montreal, 30 April 1883.
94 La Patrie (Montreal), 15 May 1879, p. 2.
95 PCQ, Letterbooks, 1870-74, No. 245, J.G. Sippell to F. Braun, Montreal, 28 June 1871.
96 Ibid., 1881-84, p. 230, L.A. Lesage to C. Ulrich, Montreal, 29 May 1882.
97 Ibid., 1887-88, pp. 577-8, E.H. Parent to A.P. Bradley, Montreal, 10 Feb. 1888.
98 Ibid., 1892-93, pp. 392-5, E.H. Parent to T. Trudeau, Montreal, 30 June 1892.
99 Ibid., 1870-74, No. 245, J.G. Sippell to F. Braun, Montreal, 28 June 1871.
100 Ibid., 1874-76, No. 1296, pp. 483-4, J.G. Sippell to W. Buckingham, Montreal, 25 July 1876.
101 Ibid., 1877-78, p. 192, G.F. Baillargé to F. Braun, Montreal, 27 Nov. 1877.
102 Ibid., 1892-93, pp. 396-7, E.H. Parent to T. Trudeau, Montreal, 30 June 1892.
103 Ibid., 1870-74, No. 1273, J.G. Sippell to C. Préfontaine, Montreal, 18 April 1873.
104 Ibid., 1878, p. 355, G.F. Baillargé to F. Braun, Montreal, 14 June 1878.
105 Ibid., 1887-88, p. 340, E.H. Parent to A.P. Bradley, Montreal, 28 Sept. 1887.
106 Ibid., 1881-84, pp. 588-9, E.H. Parent to A.P. Bradley, Montreal, 15 March 1883.
107 Ibid., 1870-74, No. 1479, J.G. Sippell to C. Préfontaine, Montreal, 21 July 1873.
108 Ibid., 1881-84, pp. 588-9, E.H. Parent to A.P. Bradley, Montreal, 15 March 1883.
109 Ibid., 1884-87, pp. 455-6, E.H. Parent to A.P. Bradley, Montreal, 28 July 1885.
110 Ibid., 1895-96, p. 827, E. Marceau to P.B. Benoit, Montreal, 5 Dec. 1895.
111 Ibid., 1887-88, p. 94, L.A. Lesage to P.B. Benoit, Montreal, 16 May 1887.
112 Ibid., p. 342, E.H. Parent to P.B. Benoit, Montreal, 30 Sept. 1887.
113 Ibid., 1888-90, pp. 354-5, E.H. Parent to P.B. Benoit, Montreal, 10 Sept. 1889.
114 Ibid., 1884-87, p. 1012, E.H. Parent to P.B. Benoit, Montreal, 18 Sept. 1886.
115 Ibid., 1870-74, No. 503, J.G. Sippell to F. Braun, Montreal, 4 Nov. 1871.
116 Ibid., No. 1034, J. Brennan to J.G. Sippell, Saint-Jean, 26 Oct. 1872.
117 Ibid., 1881-84, pp. 1215-6, E.H. Parent to A.P. Bradley, Montreal, 18 July 1884.
118 Ibid., 1865-70, No. 1838, J.G. Sippell to F. Braun, Montreal, 18 March 1870.
119 Ibid., 1870-74, No. 1050, J.G. Sippell to F. Braun, Montreal, 6 Nov. 1872.
120 Ibid., 1874-76, No. 338, pp. 128-9, J.G. Sippell to F. Braun, Montreal, 28 Oct. 1874.
121 Ibid., 1881-84, pp. 354-5, E.H. Parent to A.P. Bradley, Montreal, 18 Sept. 1882.
122 Ibid.
123 PAC, RG43, B1(a), Vol. 256, Memorandum respecting collections of Mr. Pinsonneault, Harbour Master, St. Johns, P.Q., 23 October 1882.
124 PCQ, Letterbooks, 1878, pp. 401-3, G.F. Baillargé to F. Braun, Montreal, 22 June 1878.
125 Ibid., 1878-80, pp. 472-3, J.G. Sippell to L. Ouimet, Montreal, 5 May 1879.
126 La Patrie (Montreal), 19 July 1879, p. 2.
127 PCQ, Letterbooks, 1887-88, pp. 148-9, E.H. Parent to A.P. Bradley, Montreal, 15 June 1887.
128 Ibid., pp. 934-5, E.H. Parent to A.P. Bradley, Montreal, 18 Oct. 1888.
129 Ibid., p. 727, L.A. Lesage to P.B. Benoit, Montreal, 21 May 1888.
130 Ibid., 1878, p. 170, G.F. Baillargé to L. Larue, Montreal, 2 May 1878.
131 PAC, RG43, B1(a), Vol. 261, Request from ship operators on the Richelieu, Saint-Ours, 18 March 1880.
132 PCQ, Letterbooks, 1880-81, p. 173, E.H. Parent to F. Braun, Montreal, 18 June 1880.
133 Ibid., pp. 213-4, E.H Parent to F. Braun, Montreal, 15 July 1880.

134 Ibid., p. 237, E.H. Parent to Lévi Larue, Montreal, 29 July 1880.
135 Ibid., 1888-90, p. 106, E.H. Parent to A.P. Bradley, Montreal, 5 Feb. 1889.
136 Ibid., 1884-87, p. 1122, E.H. Parent to A.P. Bradley, Montreal, 17 Nov. 1886.
137 Ibid., 1890-92, pp. 9-10, E.H. Parent to A.P. Bradley, Montreal, 30 Oct. 1890.
138 Ibid.
139 Ibid., 1888-90, p. 32, E.H. Parent to A.P. Bradley, Montreal, 3 Dec. 1888.
140 Ibid., 1884-87, p. 971, L.A. Lesage to P.B. Benoit, Montreal, 30 Aug. 1886.
141 Ibid., 1887-88, pp. 280-2, E.H. Parent to A.P. Bradley, Montreal, 23 Aug. 1887.
142 Ibid., 1890-92, p. 9, E.H. Parent to A.P. Bradley, Montreal, 30 Oct. 1890.
143 Ibid., 1893, p. 607, E. Marceau to C. Schreiber, Montreal, 26 July 1893.
144 PCQ, Miscellaneous files, Rapport Annuel du surintendant P.B. Benoit, 15 Aug. 1893.
145 Ibid., 5 Nov. 1891.
146 Ibid., Letterbooks, 1892-93, p. 478, E.H. Parent to T. Trudeau, Montreal, 16 Aug. 1892.
147 Ibid., 1887-88, p. 243, E.H. Parent to P.B. Benoit, 30 July 1887; ibid., 1888-90, p. 865, L.A. Lesage to P.B. Benoit, 25 Aug. 1890.
148 Ibid., 1892-93, p. 502, E.H. Parent to T. Trudeau, Montreal, 7 Sept. 1892; pp. 552-3, E.H. Parent to T. Trudeau, Montreal, 29 Sept. 1892.
149 Ibid., 1880-81, pp. 136-7, T.W. Harrington to F. Braun, Montreal, 15 May 1880; ibid., 1892-93, pp. 392-5, E.H. Parent to T. Trudeau, Montreal, 30 June 1892.
150 Ibid., 1890-92, pp. 641-5, E.H. Parent to A.P. Bradley, Montreal, 25 Sept. 1891.
151 CP, Sessional Papers, 1874, No. 2.
152 Ibid., 1880, No. 6.
153 Ibid., 1886, No. 13.
154 Ibid., 1887, No. 13.
155 Ibid., 1891, No. 10.
156 PCQ, Letterbooks, 1894-95, p. 100, E. Marceau to A. Coderre, Montreal, 8 Aug. 1894.

V Political Appointments and Employment Policy: 1896-1920

1 The Concise Oxford Dictionary of Current English, 6th ed., s.v. "Patron," "Patronage."
2 Robert M. Dawson, The Civil Service, p. 25.
3 Ibid.
4 Ibid., p. 26.
5 Ibid., pp. 31-2.
6 Ibid., p. 75.
7 Ibid., p. 82.
8 Ibid., p. 92.
9 J.E. Hodgetts, The Biography of an Institution: The Civil Service Commission of Canada, 1908-1967 (Montreal: McGill-Queen's University Press, 1972) (hereafter cited as Biography of an Institution), p. 14.
10 PCQ, Letterbooks, 1870-74, No. 152, J.G. Sippell to F. Braun, Montreal, 1 May 1871.
11 Ibid., 1877-78, pp. 91-2, G.F. Baillargé to L. Ouimet, Montreal, 5 Nov. 1877.
12 Ibid., 1878, pp. 575-6, G.F. Baillargé to F. Braun, Montreal, 13 Aug. 1878.
13 Ibid., 1870-74, No. 1390, J.G. Sippell to C. Préfontaine, Montreal, 27 June 1873.
14 Ibid., No. 1417, J.G. Sippell to F. Braun, Montreal, 11 July 1873.
15 Ibid., No. 287, Memorandum to the Hon. Hector Langevin, Beauharnois, 17 May 1871.
16 Robert M. Dawson, The Civil Service, p. 31.
17 La Patrie (Montreal), 15 May 1879, p. 2.
18 La Minerve (Montreal), 21 May 1879, p. 2.
19 PAC, RG43, B1(a), Vol. 256, No. 93309.
20 PCQ, Letterbooks, 1881-84, p. 651, L.A. Lesage to L. Larue, Montreal, 30 April 1883.
21 Ibid., 1880-81, p. 389, E.H. Parent to F. Braun, Montreal, 11 Oct. 1880.
22 Ibid., 1887-88, pp. 784-5, E.H. Parent to A.P. Bradley, Montreal, 9 July 1888.
23 Robert M. Dawson, The Civil Service, p. 72.
24 Ibid., p. 73.

25 PAC, RG43, B1(a), Vol. 260, No. 173232, Report of Commissioner G.A. Mothersill to the Hon. A.G. Blair, 24 March 1899.
26 PCQ, Letterbooks, 1902-03, pp. 164-5, L.A. Lesage to the Hon. R. Préfontaine, Montreal, 13 Jan. 1903.
27 PAC, RG43, B2(a), Vol. 376, No. 12258, Statement of changes in staff of Quebec Canals, 15 Jan. 1898.
28 PCQ, Letterbooks, 1896-97, pp. 144-6, E. Marceau to J.A.C. Madore, Montreal, 8 Jan. 1897.
29 Ibid., pp. 389-90, E. Marceau to C. Schreiber, Montreal, 22 March 1897.
30 Ibid., p. 390.
31 Ibid., p. 417, E. Marceau to C. Schreiber, Montreal, 26 March 1897.
32 Ibid., pp. 743-4, E. Marceau to C. Schreiber, Montreal, 8 May 1897.
33 Ibid., 1897, p. 123, E. Marceau to C. Schreiber, Montreal, 10 July 1897.
34 Ibid., 1898-99, p. 221, E. Marceau to A. Coderre, Montreal, 17 Oct. 1898.
35 Ibid., p. 375, E. Marceau to O. Laventure, Montreal, 22 Nov. 1898.
36 Ibid., 1906, p. 717, E. Marceau to P.B. Benoit, Montreal, 6 Sept. 1906.
37 Ibid., 1912, p. 100, E. Marceau to P.A. Jodoin, Montreal, 20 Feb. 1912.
38 Sandra J. Gillis, op. cit., p. 11.
39 Denis Vaugeois and Jacques Lacoursière, op. cit., pp. 461-2.
40 DBS, Summary of Canal Statistics, p. 461-2.
41 PCQ, Letterbooks, 1892-93, pp. 392-5, E.H. Parent to T. Trudeau, Montreal, 30 June 1892.
42 Ibid., 1902-03, pp. 164-5, L.A. Lesage to the Hon. R. Préfontaine, Montreal, 13 Jan. 1903.
43 Ibid., 1896-97, p. 983, E. Marceau to P.B. Benoit, Montreal, 16 June 1897.
44 PAC, RG43, B1(a), Vol. 260, G.A. Mothersill to the Hon. A.G. Blair, Ottawa, 24 March 1899.
45 PCQ, Letterbooks, 1901-02, p. 378, E. Marceau to P.B. Benoit, Montreal, 8 Feb. 1902.
46 Ibid., 1904, p. 13, E. Marceau to L.K. Jones, Montreal, 26 May 1904.
47 Ibid., p. 693, E. Marceau to P.B. Benoit, Montreal, 30 Aug. 1904.
48 Ibid., 1906, p. 449, E. Marceau to M.J. Butler, Montreal, 18 July 1906.
49 Ibid., 1909, p. 551, E. Marceau to M.J. Butler, Montreal, 7 June 1909.
50 Ibid., 1911-12, p. 422, E. Marceau to W.A. Bowden, Montreal, 12 Sept. 1911.
51 Ibid., 1904-05, pp. 546-8, E. Marceau to L.K. Jones, Montreal, 15 Feb. 1905.
52 PAC, RG43, B2(a), Vol. 307, No. 8508, 19 March 1910.
53 PCQ, Letterbooks, 1911-12, p. 20, E. Marceau to L. Lavoie, Montreal, 13 June 1911.
54 Ibid., 1915-16, pp. 512-4, E. Marceau to A.W. Campbell, 21 Feb. 1916.
55 Ibid.
56 Ibid., 1915-16, p. 963, E. Marceau to W.A. Bowden, Montreal, 17 June 1916.
57 Ibid., 1917-18, p. 792, E. Marceau to all superintendents, Montreal, 21 March 1918.
58 Ibid., 1916-17, pp. 316-7, E. Marceau to Major G.A. Bell, Montreal, 27 Oct. 1916.
59 Ibid., 1917-18, p. 322, E. Marceau to W.A. Bowden, Montreal, 22 Sept. 1917.
60 Ibid., 1918-19, p. 33, E. Marceau to W.A. Bowden, Montreal, 6 June 1918.
61 Ibid., p. 320, E. Marceau to all superintendents, Montreal, 3 Sept. 1918.
62 Ibid., 1917-18, p. 100, E. Marceau to all superintendents, Montreal, 20 July 1917.
63 Ibid., p. 101.
64 Ibid., p. 760, E. Marceau to superintendents, Montreal, 6 March 1918.
65 Ibid., p. 897, E. Marceau to W.A. Bowden, Montreal, 23 April 1918.
66 Ibid., p. 833, E. Marceau to Major G.A. Bell, Montreal, 6 April 1918.
67 J.E. Hodgetts, Biography of an Institution, pp. 54-5.
68 PCQ, Letterbooks, 1917-18, p. 836, E. Marceau to W.A. Bowden, Montreal, 8 April 1918.
69 Ibid., 1919, p. 298, L.A. Lesage to J.E. Robitaille, Montreal, 11 April 1919.
70 Ibid., pp. 465-6, L.A. Lesage to J.E. Robitaille, Montreal, 23 May 1919.
71 Ibid., 1919-20, p. 98, A.E. Dubuc to W. Cleaver, Montreal, 24 Nov. 1919.
72 Ibid., 1917-18, p. 913, E. Marceau to all superintendents, Montreal, 26 April 1918.
73 Ibid., 1919, p. 195, L.A. Lesage to W.A. Bowden, Montreal, 14 March 1919.
74 Ibid., 1902-03, pp. 170-2, L.A. Lesage to the Hon. R. Préfontaine, Montreal, 13 Jan. 1903.
75 Ibid., p. 786, E. Marceau to all collectors, Montreal, 2 May 1903.

76 Ibid., 1909, p. 375, L.A. Lesage to all statisticians, Montreal, 3 May 1909.
77 Ibid., 1919-20, p. 381, A.E. Dubuc to all superintendents, Montreal, 22 Jan. 1920.
78 Ibid., 1899-1900, p. 39, E. Marceau to P.B. Benoit, Montreal, 1 Dec. 1899.
79 Ibid., 1912-13, pp. 889-90, E. Marceau to the Hon. F. Cockrane, Montreal, 3 March 1913.
80 PAC, RG43, B1(a), Vol. 261, G. Hardrill to the Hon. A.G. Blair, Montreal, 4 Dec. 1900.
81 PCQ, Letterbooks, 1904-05, pp. 398-9, E. Marceau to L.K. Jones, Montreal, 23 Feb. 1905.
82 Ibid., 1908, p. 522, E. Marceau to L.K. Jones, Montreal, 11 April 1908.
83 Ibid., 1919, p. 794, L.A. Lesage to W.A. Bowden, Montreal, 26 Aug. 1919.
84 Le Canada-Français (Saint-Jean, Que.), 4 April 1913, p. 6.
85 PCQ, Letterbooks, 1918-19, p. 87, L.A. Lesage to J.W. Pugsley, Montreal, 21 June 1918.
86 PAC, RG43, B2(a), Vol. 307, No. 8508, 19 March 1910, "Statement of Regular Staff, Saint-Ours."
87 PCQ, Letterbooks, 1919, p. 159, L.A. Lesage to W.A. Bowden, Montreal, 3 March 1919.
88 Ibid., Miscellaneous documents, "Rapport Annuel du surintendent Laventure à E. Marceau," Saint-Ours, 8 July 1902.
89 Ibid., Letterbooks, 1901-02, p. 267, E. Marceau to O. Laventure, 30 Dec. 1901.

VI Stagnation and Decline: 1920-1950

1 DBS, Summary of Canal Statistics, p. 29.
2 PAC, RG43, B2(a), Vol. 389, No. 14232, Pt. 1, "Proposed Estimates for Fiscal Year 1922-1923: Operation and Maintenance," A.E. Dubuc to W.A. Bowden, Montreal, 19 Jan. 1922.
3 Denis Vaugeois and Jacques Lacoursière, op. cit., pp. 502-3.
4 Ibid., p. 504.
5 DBS, Summary of Canal Statistics, p. 29.
6 Ibid.
7 P.-André Sévigny, op. cit., p. 64.
8 Ibid., p. 63.
9 PAC, RG43, B2(a), Vol. 339, No. 9603, Pt. 1, "Superintending Engineer's Office: Estimated Cost of Salaries for the Fiscal Year Ending the 31st March 1913."
10 Ibid., Vol. 189, No. 11647, "Superintending Engineer's Office: Estimated Cost of Salaries for the Fiscal Year Ending the 31st March 1916."
11 Ibid., Vol. 389, No. 14232, Pt. 1, A.E. Dubuc to W.A. Bowden, "Proposed Estimates for the Fiscal Year 1922-1923," Montreal, 19 Jan. 1922.
12 PCQ, Letterbooks, 1919-20, p. 292, A.E. Dubuc, "Circulaire aux employes du bureau de Montréal."
13 PAC, RG43, B2(a), Vol. 389, No. 14232, Pt. 1.
14 Ibid.
15 Ibid.
16 Ibid.
17 Ibid.
18 Ibid., Vol. 85, No. 3090, Pt. 1, 2 June 1931.
19 Ibid., Vol. 88, No. 3090, Pt. 10, 31 March 1937.
20 Ibid., Vol. 389, No. 14232, Pt. 1, p. 42.
21 Ibid., Vol. 87, No. 3090, Pt. 6, P. Piché to A.E. Dubuc, Montreal, 1 April 1931.
22 Ibid., Vol. 88, No. 3090, Pt. 10, Deputy minister, Department of Transport, to C.D. Howe, Ottawa, 10 Feb. 1937.
23 Ibid.
24 Ibid.
25 Ibid., J. Barcelo to E.B. Jost, Montreal, 31 March 1937.
26 PCQ, transcriptions of interviews by Louise-Andrée Hardy: René L'Heureux, Chambly, 3 March 1975, p. 45.
27 Ibid., pp. 46-7.
28 Ibid., Armand Auclair, Chambly, 25 June 1975, p. 10.
29 Ibid., Rodolphe Lecompte, Chambly, 15 May 1975, p. 21.
30 Ibid., René L'Heureux, Chambly, 3 March 1975, p. 32.

31 Ibid., p. 33.
32 Ibid., Ernest Beaulac, Chambly, 15 Jan. 1974, p. 1.
33 Ibid., p. 2.
34 Ibid., Rodolphe Lecompte, Chambly, 15 May 1975, p. 19.
35 Ibid., Zotique Potvin, Chambly, 22 April 1975, pp. 11-2.
36 Ibid., pp. 15-6.
37 Ibid., Rodolphe Lecompte, Chambly, 15 May 1975, p. 31.
38 The editor of the periodical History Workshop discussed in the editorial "Oral History" (No. 8, Autumn 1979, pp. i-ii) the usefulness of oral history as source material. While acknowledging its drawbacks and limitations (reliability, contradictions, inconsistency, subjectivity and individual perception), he stresses its richness, not only in conventional areas of activity, such as personal and community history, but in politcal and socio-economic history.

Although the oral statements used in this study have been very useful, they are too imperfect to constitute a true oral history of the Richelieu canal workers. The interviews were not scientifically designed or conducted, the sampling is too small, workers at the Saint-Ours lock are not included, and several groups of employees at Chambly, such as the day labourers, the bridge tenders and the skilled tradesmen, are unrepresented.

Conclusion

1 Nancy Stunden, "Labour, Records and Archives: The Struggle for a Heritage," Archivaria, No. 4 (Summer 1977), p. 74.
2 Bill Doherty, "Public Service Unions: The Early Days," The Civil Service Review, Vol. 53, No. 1 (March 1980), p. 11.

Bibliography

Angers, Bernard
"Syndicats ouvriers et syndicats de fonctionnaires." MA thesis, Laval University, Quebec, 1963.

Appleton, Thomas E.
Usque ad Mare: History of the Canadian Coast Guard and Marine Services. Queen's Printer, Ottawa, 1969.

Bélanger, N., et al.
Les travailleurs québécois, 1851-1896. Presses de l'université du Québec, Montreal, 1973.

Canada
The Blue Book, or Statement of the Public Service of the Former Province of Canada for the Half-year ended 30th June 1867. Hunter, Rose and Company, Ottawa, 1868.

Canada. Civil Service Commission.
First Annual Report of the Civil Service Commission of Canada, 1908-1909. Ottawa, King's Printer, 1909.

Canada. Department of the Environment. Parks Canada. Quebec Regional Office. Historical and Archaeological Research. Quebec Canals.
Estimates, 1922-68, 48 vols.
Letterbooks, 1852-1920, 92 vols.
Miscellaneous documents and files.
Pay book of Chambly Canal employees, September 1866 to April 1869.
Superintending Engineer, Annual Reports, 1925-73, 46 vols.
Transcriptions of interviews by Louise-Andrée Hardy, Jan.-June 1975, 14 notebooks.

Canada. Department of Public Works.
General Report of the Commissioner of Public Works, for the Year Ending 30th June 1867. Hunter, Rose & Co., Ottawa, 1868.
Rapport annuel du ministère des Travaux publics.... Imprint varies, 1868-79.
Rapport général du ministère des Travaux publics.... Queen's Printer, Ottawa, 1868-83.

Canada. Department of Railways and Canals.
Rapport annuel du ministère des Chemins de fer et Canaux.... Imprint varies, Ottawa, 1880-1937.
Rapport de l'Auditeur général, 1923-24. Queen's Printer, Ottawa, 1925.

Canada. Department of Trade and Commerce. Dominion Bureau of Statistics.
Summary of Canal Statistics, 1848-1936. Ottawa, 1937.

Canada. Parliament.
Sessional Papers. Queen's Printer, Ottawa, 1867-95.

Canada (Province). Board of Works.
Rapport annuel.... Imprint varies, 1841-58.

Canada (Province). Department of Public Works.
Rapport annuel du ministère des Travaux publics.... Imprint varies, 1859-66.

Canada. Public Archives. Manuscript Division.
MG26, G, Laurier Papers, Vol. 58.
RG1, E1, Executive Council, Quebec, Lower and Upper Canada, Minute Books, State Book G.
RG4, C1, Correspondence of the Provincial and Civil Secretaries, Offices, Canada East, Vols. 14, 45, 80.
RG8, C Series, British Military and Naval Records, Vols. 42, 53, 60.
RG11, Public Works, Vols. 1-39, 47, 55-60, 63, 65, 140, 230-7, 265, 337-40, 377, 391.
RG12, Transport, Vols. 54, 462, 474, 480, 508, 511, 518, 524, 538.
RG43, Railways and Canals, B1(a), Vols. 1-15, 97-114, 238-9, 255-61, 271-6.
RG43, Railways and Canals, B2(a), Vols. 17-26, 35, 39, 59-60, 66-7, 79-82, 85-9, 102, 187-9, 277, 307, 317, 339, 376, 389, 397.
RG43, Railways and Canals, C1, Vols. 9, 12.

Canada. Public Archives. Public Records Division.
Records of the Department of Public Works (RG11). Ottawa, 1977. General Inventory Series, No. 8.

Le Canada-Français (Saint-Jean, Que.)
1893-1975.

Coats, R.H.
The Labor Movement in Canada. Edinburgh University Press, Toronto, 1913.

Cole, Taylor
The Canadian Bureaucracy: A Study of Canadian Civil Servants and Other Public Employees. Duke University Press, Durham, North Carolina, 1949.
"Wartime Trends in the Dominion Civil Service in Canada." Public Administration Review, Vol. 6, No. 2 (1946), pp. 157-67. Chicago.

Le Courrier de Saint-Jean (Saint-Jean, Que.)
1896-1909.

Dawson, Robert M.
"Canadian Civil Service before Confederation." Canadian Historical Review, Vol. 5, No. 2 (1924), pp. 118-31. Toronto.
The Civil Service of Canada. Oxford University Press, London, 1929.

De Bonville, J.
Jean-Baptiste Gagnepetit: les travailleurs montréalais à la fin du XIX[e] siècle. Editions de l'Aurore, Montreal, 1975.

Després, J.-P.
Le mouvement ouvrier canadien. Fides, Montreal, 1946.

Desrosiers, R., and D. Héroux
Le travailleur québécois et le syndicalisme. Editions de Sainte-Marie, Montreal, 1966.

Doherty, Bill
"Public Service Unions: The Early Days." The Civil Service Review, Vol. 53, No. 1 (March 1980), p. 11. Ottawa.

Easterbrook, W.T., and Hugh G.T. Aitken
Canadian Economic History. Macmillan, Toronto, 1967.

L'Echo d'Iberville (Saint-Jean, Que.)
1879-82.

Espesset, H., J.-P. Hardy and T. Ruddell
"Le monde du travail au Québec au XVIII[e] et au XIX[e] siècles: historiographie et état de la question." Revue d'histoire de l'Amérique française, Vol. 25, No. 4 (March 1972), pp. 499-539. Montreal.

Le Franco-Canadien (Saint-Jean, Que.)
1860-95.

Gillis, Sandra J.
The Chambly Canal: A Structural History of the Locks. Manuscript Report Series No. 170. Parks Canada, Ottawa, 1975.

Grant, W.L.
"The Civil Service of Canada." University of Toronto Quarterly, Vol. 3, No. 4 (July 1934), pp. 428-38. Toronto.

Hamelin, Jean, and Yves Roby
Histoire économique du Québec, 1851-1896. Fides, Montreal, 1971.

Harvey, Fernand
"Les travailleurs québécois au XIX[e] siècle: essai d'un cadre d'analyse sociologique." Revue d'histoire de l'Amérique française, Vol. 25, No. 4 (March 1972), pp. 540-51. Montreal.

L'Heureux, René
Canal de Chambly: 100 ans de service, 1843-1943. Editions du Richelieu, Saint-Jean, Que., 1943.

History Workshop
"Oral History" (editorial), No. 8, Autumn 1979, pp. i-ii.

Hodgetts, J.E.
The Biography of an Institution: The Civil Service Commission of Canada, 1908-1967. McGill-Queen's University Press, Montreal, 1972.
"Challenge and Response: A Retrospective View of the Public Service of Canada." Journal of the Institute of Public Administration of Canada, Vol. 7 (1964), pp. 409-21.
Pioneer Public Service: An Administrative History of the United Canadas, 1841-1867. University of Toronto Press, Toronto, 1955.

Innis, H.A.
Select Documents in Canadian Economic History, 1497-1783. University of Toronto Press, Toronto, 1929.

Kennedy, Douglas R.
The Knights of Labor of Canada. University of Western Ontario Press, London, Ont., 1956.

Leblanc, André E., and James D. Thwaites
Le monde ouvrier au Québec: bibliographie rétrospective. Les Presses de l'université du Quebec, Montreal, 1973.

Linteau, P.-A., R. Durocher and J.-C. Robert
Histoire du Québec contemporain: de la Confédération à la crise, 1867-1929. Boréal Express, Montreal, 1979.

Lipton, Charles
The Trade Union Movement in Canada, 1827-1959. Canadian Social Publications, Montreal, 1966.

Logan, H.A.
The History of Trade-Union Organization in Canada. University of Chicago Press, Chicago, 1928.

La Minerve (Montreal)
1879-92.

L'Opinion publique (Montreal)
1880-83.

Ouellet, Fernand
Histoire économique et sociale du Québec, 1760-1850. Fides, Montreal, 1966.

La Patrie (Montreal)
1879-83.

Pentland, H.C.
"The Lachine Strike of 1843." Canadian Historical Review, Vol. 29, No. 3 (Sept. 1948), pp. 255-77. Toronto.

Pouliot, Léon
"Un conflit ouvrier au canal de Beauharnois en 1843." Bulletin des Recherches Historiques, Vol. 62, No. 3 (1956), pp. 149-55. Lévis.

La Protectioniste (Saint-Jean, Que.)
1882.

Le Richelieu (Saint-Jean, Que.)
1943.

Sévigny, P.-André
Le canal Chambly: utilisation commerciale. Travail inédit No. 346, Parks Canada, Ottawa, 1978. (Now published, as Trade and Navigation on the Chambly Canal: A Historical Overview, Parks Canada, Ottawa, 1983.)

Sharp, W.R.
"The Evolution of the Civil Service." University of Toronto Quarterly, Vol. 8, No. 2 (Jan. 1939), pp. 155-64. Toronto.

Stunden, Nancy
"Labour, Records and Archives: The Struggle for a Heritage." Archivaria, No. 4 (1977), p. 74. Ottawa.

Tessier, Albert
"Un projet de canalisation du Richelieu en 1855." Cahier des Dix, Vol. 26 (1961), pp. 199-210. Montreal.

Vaugeois, Denis, and Jacques Lacoursière
Canada-Québec, synthèse historique. Editions du Renouveau Pédagogique, Montreal, 1970.